JUNE 2023

CHOICE

JUNE 30

THE EOFY ISSUE

Tax tips

Health insurance, superannuation & tech buys

WISE BUYS

Make it a sustainable sales season

249 *products* **TESTED**

Smartphones
Freezers
Dryers
Turntables
Stick vacuums
Freestanding ovens
Reverse-cycle air con
TVs & more

RETAIL RADAR

How you're being tracked while shopping

Plus **Blast from the past: Long ago customers surprised in data breach**

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Watch your step

Avoid falling into a credit trap this sale season

Australians love a bargain, so the end of financial year sales are typically a peak season for retailers. But this year, cost-of-living pressures mean it's particularly important to avoid the traps that retailers and finance companies lay for enthusiastic and unsuspecting shoppers.

The biggest of those is to trick you into walking out with a debt you hadn't planned for. We've all seen the ads spruiking interest-free periods, but that's not how most of these arrangements pan out. They usually turn into high-interest loans or credit cards at the end of the period, leaving many people with debts they can't afford to repay.

One of the worst examples of this is the partnership between Harvey Norman and Latitude, which we highlighted through a Shonky Award in 2020. If you fail to pay off a purchase within the interest-free period and are transferred to a Latitude Go credit card, you'll face a whopping interest rate of 25.9% per annum – one of the highest on the market. That's sure to cost more than anything you might have saved in discounts.

Amex was recently taken to court by the Australian Securities and Investments Commission (ASIC) over sales practices that allegedly saw some people who thought they'd signed up to a loyalty scheme ending up with a credit card. ASIC pointed to the unusual percentage of people who subsequently cancelled their David Jones Amex card – presumably because they were surprised to learn they had one. This case is still before the courts, but provides a helpful warning to shoppers.

Another trick at the point of sale is to persuade you to pay extra for an 'extended warranty'. Regardless of what the manufacturer says about its warranty period, you've got strong rights under the Australian Consumer Law (ACL). The consumer guarantees under the ACL require goods to be fit for purpose and to last for a reasonable period of time. If there's a major failure within a reasonable time after purchase, you are entitled to a refund, repair or replacement. Whenever we examine the terms and conditions of extended warranties, we find they offer little or no extra protection, so you may find yourself paying for something that largely replicates your existing legal rights.

Finally, don't get tricked into thinking buy now, pay later products are any different to other credit products.

While they have been designed to get around credit laws, in reality they are very similar to a personal loan or credit card; if you can't make the repayments, you can end up paying a lot more.

CHOICE is campaigning for changes to the law to stop the worst of these practices, but in the meantime, it pays to take a healthy dose of cynicism before heading to the sales.

Alan

Alan Kirkland, CEO
Email: alan@choice.com.au
Twitter: @AlanKirkland

CHOICE

CHOICE gives you the power to choose the best goods and services, and avoid the worst. Wherever possible, we pay full price for the products we test, so we remain 100% independent. We don't take advertising or freebies from industry. We're not a government body and our consumer publishing and advocacy is almost entirely funded by membership. Memberships include online access and services such as CHOICE Help. CHOICE product ratings are based on lab tests, expert assessments and consumer surveys. CHOICE staff also research a wide range of consumer services. They reveal the truth behind the facts and figures, and investigate the quality and the claims.

BECOME A MEMBER To review the full range of membership options and benefits go to **choice.com.au/signup**.

MEMBERSHIPS/RENEWALS Call 1800 069 552 or email us at **ausconsumer@choice.com.au**.

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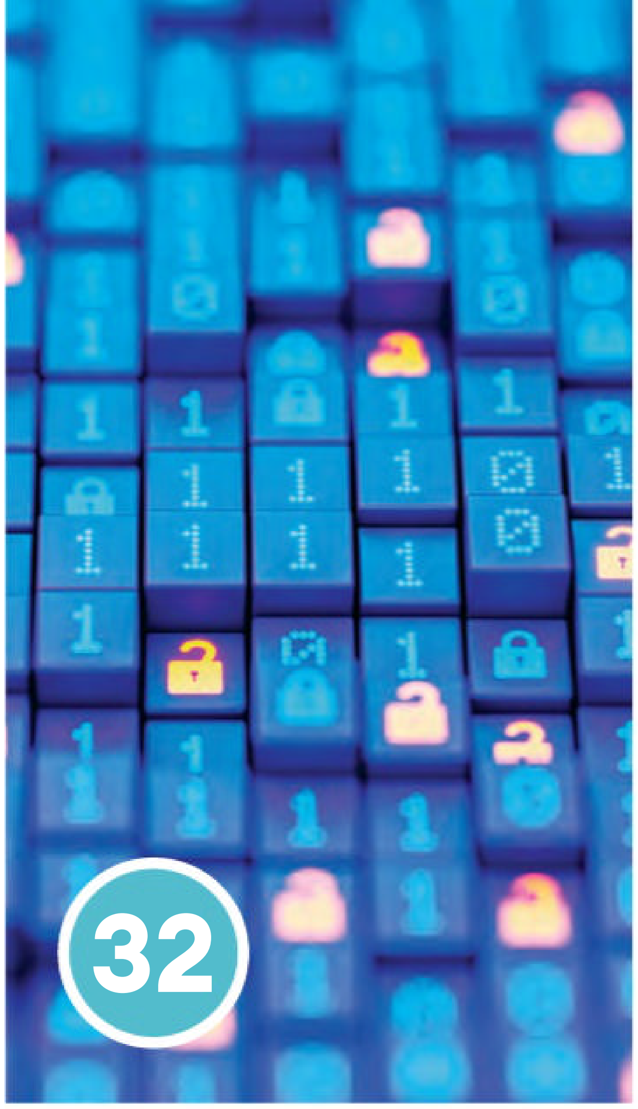

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CHOICE magazine provides a selection of our top product reviews. We can't always include all the models we've tested, but you'll always find the products that scored the best. To view complete results for all our tests, go to **choice.com.au**, or call Customer Service on **1800 069 552** to add full online access to your membership package.

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The latest consumer news in brief

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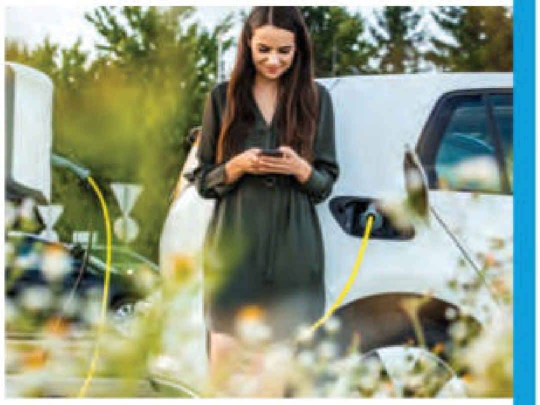

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ASIC report finds banks are failing scam victims

ASIC

When scammers target you and the money comes out of your bank account, you'd expect the bank to take some responsibility. After all, it's the well-resourced institution that's facilitating the transaction to the scammer's account and presumably would have policies in place to protect you. But it turns out that many banks do very little to prevent scams in the first place or to reimburse victims after they happen.

A report by the Australian Securities and Investments Commission (ASIC) shows how poorly banks are performing when it comes to protecting their customers from the rising tide of scams, many of which have become sophisticated enough to fool even the most careful of consumers. In the last financial year, about 31,700 customers of Australia's biggest banks lost more than $550 million to scammers.

CUSTOMERS BEARING THE BRUNT

According to the ASIC report, bank customers (rather than the banks themselves) are nearly always the bearer of scam losses, accounting for 96% of total scam losses across the banking sector. And banks as a whole have put a stop to a mere 13% of scam payments, while bank reimbursements ranged from a paltry two to five percent.

When ASIC reviewed three banks who had available scam-loss data, it found that compensation was paid in only around 11% of the cases.

Worse, dealing with a bank after you've been scammed can add additional layers of stress. "Our review found there were inconsistent experiences and outcomes for customers who were the victim of a scam, and in some cases a bank's response may contribute to further distress for a customer," says ASIC deputy chair Sarah Court. "[Banks] need to reconsider the ways they respond to and engage with scam victims to reduce further distress and help them better manage the situation."

CHOICE head of policy Patrick Veyret says, "ASIC's report shows Australian banks are failing to protect people from the devastating harms of scams. Banks need to take much greater responsibility for detecting and preventing scams."

LODGING A COMPLAINT CAN HELP

Not surprisingly, the ASIC review found that customers who lodge a complaint with their bank after being scammed were more likely to receive compensation of some sort.

ASIC is urging banks as well as telecommunication providers and digital platforms to read the report as a guide to "developing consumer-focused scams management practices and strategies".

ANDY KOLLMORGEN

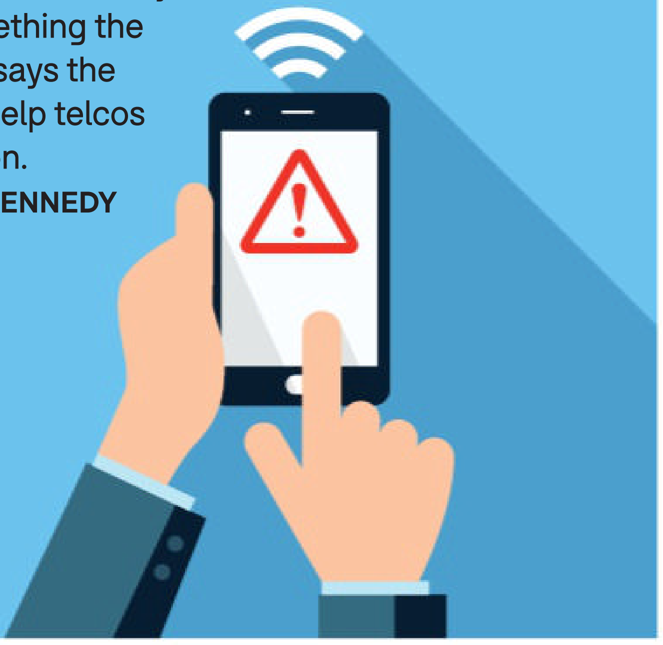
Government promises anti-scam text-message registry

The federal government will put $10 million towards setting up an SMS sender ID Registry to disrupt the growth in text-message scams. The money, set aside in the Federal Budget, will be given to the Australian Communications and Media Authority (ACMA) over four years, so the watchdog can launch and operate the registry.

Assistant Treasurer Stephen Jones says the facility will make it harder for fraudsters to hijack the SMS accounts of reputable companies and slip their messages into legitimate communication threads. "We know text messages have topped phone calls as a scammer's tool of choice. [This] will not only make it tougher for scammers to imitate trusted brands through SMS, it will be crucial in disrupting a key channel scammers use to target victims."

Almost half of Australians reported receiving a fake or deceiving text last year and the format is now the favoured way for conducting phishing fraud, where victims are convinced to provide personal information. Scammers are being aided in this by being able to imitate the sender IDs of credible institutions such as MyGov, Linkt and major banks – something the government says the registry will help telcos crack down on.

LIAM KENNEDY



Banks should reimburse scam victims

The Melbourne-based advocacy organisation Consumer Action Legal Centre is calling on the federal government to force banks to reimburse customers who fall victim to scams. In 2022, the amount of money Australians lost to scams ballooned to $3.1 billion, a 79% increase compared to 2021. The ACCC estimates that 30% of scams go unreported, meaning 2022 losses could have been as high as $4.3 billion.

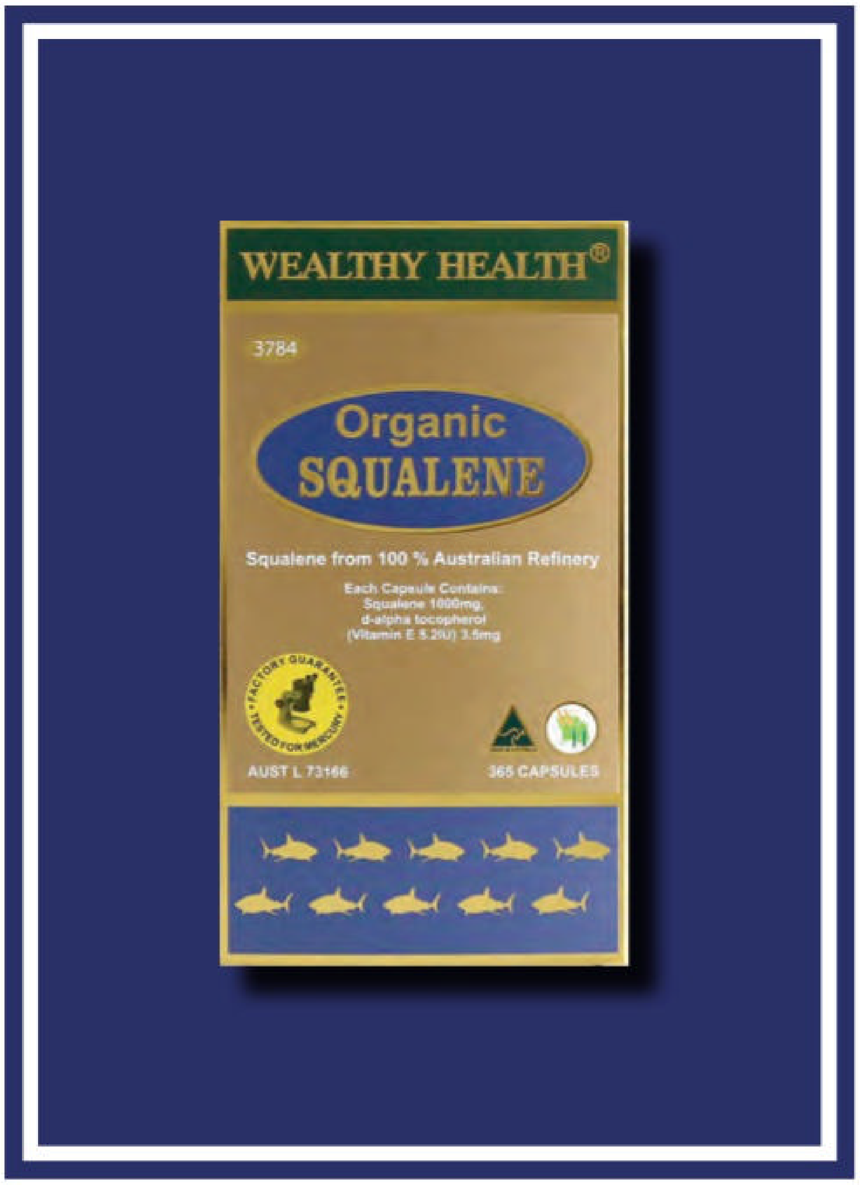
"The huge scale of theft and losses revealed by the [ACCC] report demands that urgent, decisive action must be taken now by government," says Consumer Action CEO Stephanie Tonkin. "Scammers are becoming far more sophisticated, using cutting-edge technology to trick and steal. We speak to people who call our helplines who have lost their entire life savings to schemes that destroy their finances, causing disaster for them and their family. It's heartbreaking."

Consumer Action says a coordinated approach across government, the private sector and law enforcement is the best way forward, but the federal government "must mandate the banks to reimburse customers caught up in scams, otherwise it just won't work," Tonkin says.

ANDY KOLLMORGEN

CHOICE is investigating ways to improve consumer protections to prevent and address the harms caused by scams. To help inform this work, we want to get your thoughts and hear about your experiences. Please visit **choice.com.au/scams-survey**.

IMAGES: GETTY/ASIC.COM.AU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365 CAPSULES

Fishy claims

A vitamin and supplement company is offering to refund customers after claiming one of its products contained oil from sharks caught only in Australian waters. Universal Pharmaceuticals admitted to the ACCC that it had likely breached consumer law by claiming on its Wealthy Health website that its squalene capsules were "sustainably sourced from sharks from the crystal-clear oceans of Australia". Squalene is a colourless oil produced from animals, including from shark liver.

The ACCC says it became suspicious that the company had started using oil sourced from overseas and was concerned the company's advertisements were misleading consumers and giving the company an unfair advantage.

"Universal Pharmaceuticals represented that it had sourced Australian ingredients when, based on the information we had obtained, we were concerned that it knew from at least 2019 that the squalene used was not sourced exclusively from Australian waters," says ACCC commissioner Liza Carver.

The company has offered refunds to two customers who bought the squalene, agreed to publish a correction on its website, and promised to provide consumer law training to its director and staff.

LIAM KENNEDY

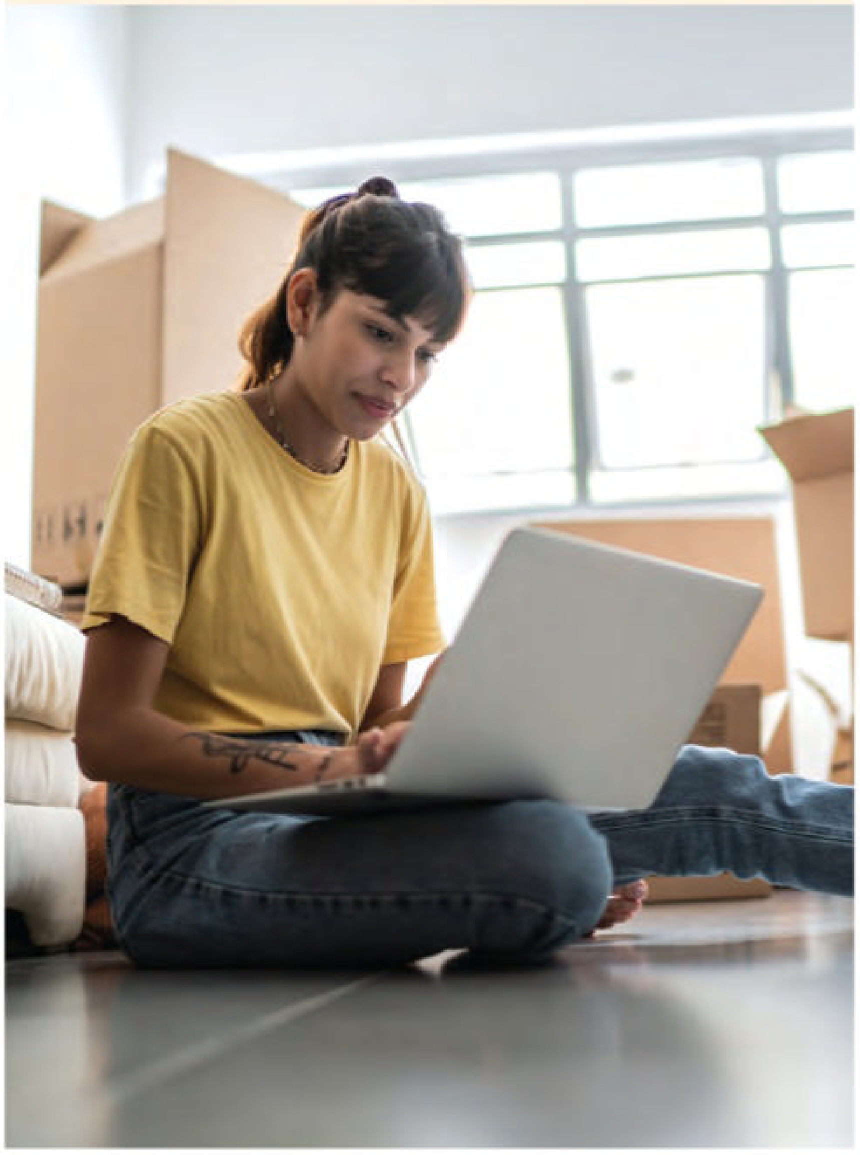
CHOICE raises alarm on RentTech

If you're a renter or know someone who rents, chances are you've come across RentTech – third-party platforms used to apply for rental properties, pay rent, or request maintenance.

Renters are often pressured to use these platforms, and are slugged with hidden costs or forced to provide sensitive information despite privacy concerns. Additionally, we've found a number of intrusive and potentially discriminatory technologies operated by some of the platforms, used to screen and score people looking for a roof over their heads.

We've called for a number of federal and state reforms to make things fairer for the many people and families who rent across the country. One critical area that needs reform urgently is the Privacy Act, to ensure RentTech businesses only collect and use information in a fair, safe, and reasonable way. CHOICE's Consumer Data team has been calling on the federal government to implement many of the changes recommended in a recent review. Add your voice at: **choice.com.au/privacypetition**.

RAFI ALAM



Time for telco comparison tool

The Australian Communications Consumer Action Network (ACCAN) is calling on the federal government to develop a quick and easy comparison tool for telco customers, who they say are often confused by the complicated landline, mobile and internet market.

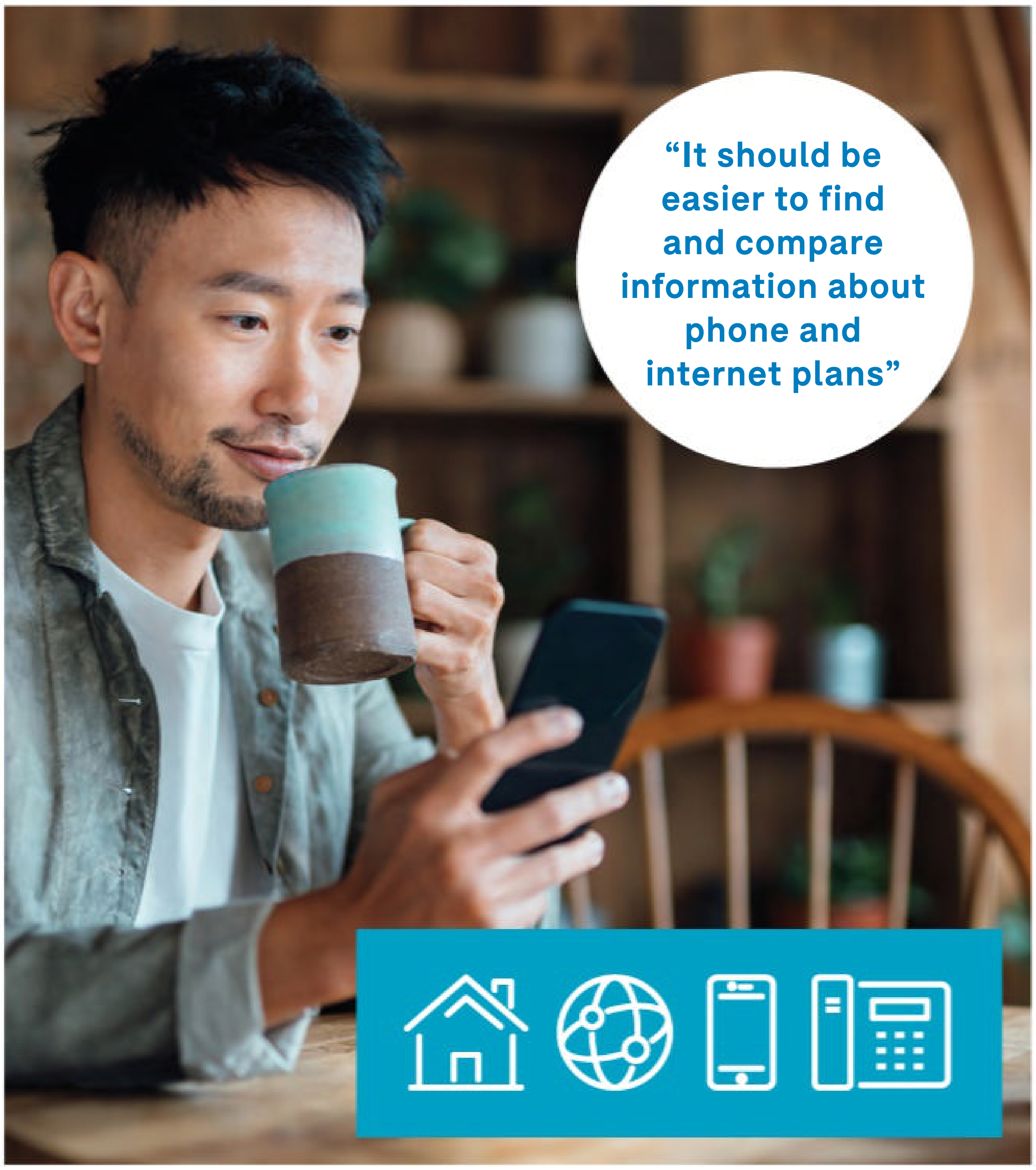
ACCAN says existing comparison tools are not easily accessible and don't cover the entire market.

"Making it easier for time-poor consumers to compare deals and identify the best value options on the market will help them to save money, time and a lot of confusion," says ACCAN CEO Andrew Williams.

"ACCAN's research shows that consumers overwhelmingly agree that it should be easier to find and compare information about phone and internet plans."

ACCAN says the tool would also help people eligible for low-income and other concessions to gain access to those benefits from their provider.

JARNI BLAKKARLY



"It should be easier to find and compare information about phone and internet plans"

Telcos letting down customers in financial hardship

The ACMA says telcos are letting down customers in financial hardship, as the cost of living continues to rise. According to their recent report, 2.4 million Australians experienced difficulty paying or had concerns with their bills in the past 12 months. The report also showed that only 57% (64% of those in financial difficulty) were aware they could contact their telco for help managing bills.

"With the current cost of living pressures, telcos need to be even more attuned to the needs of customers who may be doing it hard," says ACMA chair Nerida O'Loughlin. "This report identifies areas where we expect the telco industry to lift its game."

Meanwhile, the Consumer Action Law Centre says the "scathing" report shows that the industry self-regulation model wasn't working for consumers.

"Telecommunications are an essential service like energy and water, vital for every aspect of our lives; work, health, education, and safety. Disconnections should not happen or be the absolutely last resort," says Consumer Action CEO Stephanie Tonkin.

JARNI BLAKKARLY

IMAGES: GETTY

National Electric Vehicle Strategy gets into gear

The federal government recently released its National Electric Vehicle Strategy, a roadmap for accelerating the uptake of electric vehicles (EVs) in Australia. For a long time, Australia has been stuck in the slow lane when it comes to electric vehicles, partly due to our lack of fuel efficiency standards.

Getting the strategy right is crucial, as electric vehicles have the potential to lower transport costs for households and assist with growing cost of living pressures, as well as benefit the environment. That's why CHOICE made a submission to the National Electric Vehicle Strategy last year, calling on the government to introduce fuel-efficiency standards and implement measures that would make the electric vehicle market accessible for all consumers.

It's encouraging to see many of the CHOICE recommendations reflected in the newly released strategy, including a greater choice of EVs, increasing national EV charging accessibility, making EVs more affordable and making it cheaper for people to run their vehicles, as well as introducing a fuel efficiency standard. However, there is more work to be done to improve emerging markets for consumers, and CHOICE will continue to monitor the implementation of the strategy and its outcomes.

ALEX SÖDERLUND

Virgin
australia

Virgin Australia's compensation deflation

A CHOICE staffer returning home to Victoria was stranded by Virgin Australia on a stormy Sydney night. Five hours prior to his 8pm flight departure, Virgin 're-booked' him onto a flight at 7am the next morning. CHOICE lodged a claim with Virgin for the reasonable costs of a hotel room and dinner. We were surprised to find Virgin's compensation limits had fallen since before the travel lockdowns, from $220 to $200 for accommodation and $50 to $30 for meals. We weren't so surprised when Virgin declined the claim.

In Australia, if your flight is cancelled due to issues 'within the airline's control', you can generally claim compensation for accommodation and meals. But if it's 'outside the airline's control' – for example due to bad weather, which was the reason given for our stranded staffer's flight cancellation – then it's your bad luck.

While CHOICE was able to accommodate our staff member, it's your own misfortune if you can't afford the cost of a Sydney hotel room. Airlines have no qualms turfing you onto the street in the rain. So next time you're flying, make sure you've got enough cash at hand for an extra night's bed and supper.

JODI BIRD

Both confessed to attempting to organise a bid-rigging cartel

Fines issued after architects tried to draw up cartel

A major architecture firm and one of its former executives have been ordered to pay almost $1 million in fines after both confessed to attempting to organise a bid-rigging cartel. ARM Architecture and its former managing director Tony Allen admitted they had engaged in cartel conduct in 2020, when Allen asked other architecture companies not to compete with ARM for the second phase of a $250 million university construction project. Allen sent emails to the eight other architecture outfits, asking them to not bid for the second round of work at Charles Darwin University after the company had already won the tender for the first phase.

ACCC chair Gina Cass-Gottlieb says the fines of $900,000 for ARM and $75,000 for Allen are a warning to other companies to not fleece the public. "When a business attempts to rig a bid or form a cartel, they harm competition by unfairly seeking to advance their interests over those of their customers," she says. "When they do so on a public project, they are also doing so at the expense of the public purse."

LIAM KENNEDY

Sports streaming giant breaches gambling ad laws

The Foxtel-owned sports streaming company Kayo has been found to have breached anti-gambling advertising laws during a May 2022 AFL match, according to the Australian Communications and Media Authority (ACMA). The rules prohibit gambling ads from being streamed during live sport events between 5am and 8.30pm, including the five minutes before and after the event.

ACMA chair Nerida O'Loughlin says streaming services have to play by the rules. "Streaming services need to comply with the rules in the same way traditional television broadcasters do," she says. "Gambling advertising during live sport is a major concern for Australians. Families want to watch live sport without needing to worry that children may come to think of gambling as a part of the game."

Kayo has been issued with a formal warning and the company says it has since implemented technical software and process upgrades.

JARNI BLAKKARLY

Kayo
RABBITOHS V COWBOYS
Tomorrow
WARATAHS V REDS
360

IMAGES: GETTY | HTTPS://AWS.AMAZON.COM/BLOGS/MEDIA/KAYO-SPORTS-BUILDS-REAL-TIME-VIEW-OF-THE-CUSTOMER-ON-AWS/

Record solar output driving down electricity prices

Rooftop and other forms of solar power generation set a new record in Australia's largest power market in the first quarter of this year, driving down wholesale electricity prices.

A new report from the Australian Energy Regulator (AER) found large-scale and rooftop solar output reached new highs in the National Electricity Market, which includes NSW, Victoria, Queensland, South Australia, Tasmania and the ACT.

AER chair Claire Savage says this record generation combined with last year's price interventions to deliver lower wholesale costs than during the same period last year. "It appears that the coal price cap interventions continue to place downward pressure on electricity prices, together with strong renewable output," she says.

Savage adds that the wholesale electricity prices her organisation is monitoring will influence the default market offer (DMO) – the cap on prices retailers can charge consumers – that the regulator is currently updating. "We continue to closely monitor electricity forward contract prices given their relationship to wholesale costs incurred by retailers and the impact it can have on the final DMO price," Savage says.

LIAM KENNEDY

Government moves to avoid Robodebt repeat

In mid-April the federal government took a critical step toward avoiding a repeat of the Robodebt scandal by prohibiting the use of external debt collectors by Centrelink to go after social welfare recipients. The Consumer Action Law Centre (Consumer Action) and Financial Counselling Australia (FCA) have welcomed the move and are calling for the government's new in-house debt recovery approach "to strictly comply with Australian Consumer Law".

When the Robodebt regime was charging full steam ahead, external debt collectors were paid commissions to recover government money, giving these private companies an incentive to pursue as many people as possible. Many victims of the scandal, of course, didn't owe any money but were harassed nonetheless.

"People were misled about the consequences of non-payment of debts, with heavy threats of legal action, the garnishing of wages and bank accounts, tax refunds and other assets or income. People were also threatened with departure prohibitions – when in fact the government did not intend to go that far," says FCA CEO Fiona Guthrie. "These were clear breaches of the ACL, and these breaches were signed off by the government of the time."

ANDY KOLLMORGEN

New heatmap shows many choice super products underperform

Australians have more than 7 million accounts in 'choice' superannuation products. 'Choice' products are those you must elect to join – you can't be defaulted into them by your employer, as you can be with MySuper products. But can you be confident your fund is performing?

Every year, the Australian Prudential Regulation Authority (APRA) releases 'heatmaps' to compare super products on key features like fees and investment returns.

The latest heatmap shows that one in five choice super options with at least an eight-year history have significantly underperformed the regulator's benchmarks.

Super Consumers Australia policy manager Rebekah Sarkoezy says the underperformance of these choice options has been a major concern given the impact of poor performance on members' retirement savings.

The regulator already runs performance tests on MySuper products, but from 1 July 2023, this same test will also apply to many choice super products. Failing funds must send a letter to members saying they've underperformed, and if a product underperforms two years in a row it is banned from taking on new members.

"We're relieved there will soon be consequences for many of these underperformers. But the job isn't finished. We're calling on the federal government to extend quality testing to retirement products and the whole of the choice market," Sarkoezy says.

DANIEL HERBORN

When does your health insurer increase premiums in 2023?

Due to COVID-19 and the fact that many people haven't been able to make full use of their health insurance policies, most private health funds are delaying their price increases until later in the year.

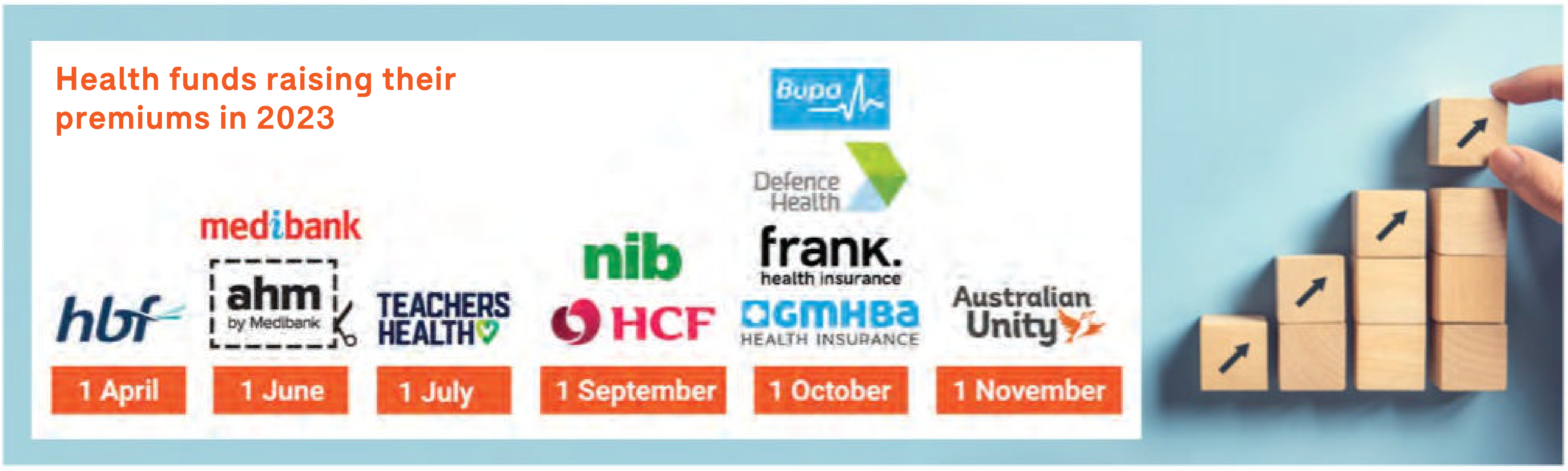
Of the big insurers, two have already increased their premiums – **HBF** by an average of 4.49% on 1 April and **Medibank/AHM** by an average of 2.96% on 1 June, but the other three are delaying their increase until later this year:

- **NIB** will delay its 2.72% premium increase until 1 September 2023 (this includes Qantas Health).
- **HCF** will delay its 3.33% premium increase until 1 September 2023 (this includes RT Health).
- **Bupa** will delay its 3.39% premium increase until 1 October 2023.

Health funds only publish their average increase. Some policies will have premium increases much larger or smaller than the average. Your health fund will let you know your policy's new premium before it takes effect.

If you can afford to pre-pay a full year's premium, you can lock in 12 (or in some cases up to 18) months of cover at that year's prices, potentially saving you hundreds of dollars depending on your policy premium increase.

UTA MIHM



IMAGES: GETTY

Significant rise in complaints to AFCA

Over 2000 complaints have been received by the Australian Financial Complaints Authority (AFCA) from flood-affected consumers in the year since the South East Queensland/Northern NSW storms.

Delays in claims handling were the most significant issue for consumers making complaints. AFCA's chief ombudsman and CEO, David Locke, says AFCA "understands that the scale of this event has put pressure on insurers, but these sorts of complaints can often be avoided through good, regular communication with customers".

AFCA has seen a 65% rise in general insurance complaints in the 2022–23 financial year so far. 10,417 complaints had been received by February 2022 compared with 17,163 by February 2023.

"We would also prefer to see insurers resolving many more complaints within their own dispute resolution process, rather than consumers having to take the extra step of coming to AFCA, prolonging the time they spend in limbo, unable to get on with their lives," says Locke.

CHOICE is currently investigating rising premiums and insurance in extreme weather events. You can share your thoughts and experiences by sending an email to: **campaigns@choice.com.au**.

BEA SHERWOOD

Tradie case a cautionary tale

The Queensland Office of Fair Trading (OFT) issued a reminder to Queenslanders earlier this year that applies to Australians around the country: make sure a tradesperson is registered and holds appropriate qualifications before agreeing to their services.

The OFT warning followed the conviction of one Jacob Anthony Moratti, who was found guilty of accepting payment from consumers, but failing to provide concreting services. He was also found guilty of telling customers that he held a licence from the Queensland Building and Construction Commission when in fact he did not.

Moratti lured in consumers by posting ads on social media and service seeking platforms using a range of business names, including Italia Concrete Services Qld, Jaytobe Concrete Services, Jakobi Concrete Construction and Jake Moratti. He asked for payment up front. He was fined $35,000 and ordered to pay over $21,200 in compensation to consumers by the Magistrates Court.

"We advise consumers to do their own checks by looking up reviews and free licence and business registers, so they only use traders with good reputations and avoid disappointment," says acting fair trading commissioner David McKarzel.

ANDY KOLLMORGEN

RANTS AND RAVES

Fairness fight more important than ever

As the cost of living crisis continues to bite, I'm reminded once again of CHOICE's mission: to work for fair, safe and just markets. We've been fighting to achieve that for more than 60 years and, while we have had some notable success, the letters, emails and phone calls from justifiably disgruntled consumers that continue to arrive with depressing regularity tell us that the fight is far from over. And it is all the more upsetting that these problems persist when so many are doing it tough.

It is all the more upsetting that these problems persist when so many are doing it tough

The figures from the latest CHOICE Consumer Pulse survey tell the story.

In the more than seven years we've been tracking the sentiment on cost-of-living pressures we've never seen such concern. A record 93% of households have seen their bills and expenses increase over the last 12 months. The foremost concern is food and groceries, with 85% of people indicating that they are worried about these costs. The cost of electricity and fuel is also causing Australians to worry about how much they're spending.

Reporting from the Australian Communications Media Authority shows that telecommunication bills are another source of pain. In early May, the ACMA released figures showing that last year more than 400,000 customers had their services disconnected and more than 2.4 million struggled to pay their bills.

People are responding as best they can. Our Consumer Pulse survey found that in the past 12 months, more than half of households have cut back on spending on non-essential items. More than a third have found it necessary to make savings on essential items, too.

Still, there's a shortfall, with many using their savings to cover the gap. Yet others are turning to unregulated buy now, pay later credit in order to make ends meet, creating the risk of debt spirals that are far too difficult to escape, and far too easy to get into.

With pressures like those squeezing so many households and no relief in sight, now is the time for fairness to be a priority. Unfortunately, there seems to be a distinct lack of fairness in the way businesses often treat us, their customers.

In recent weeks we've heard cases of companies behaving badly from across a range of industries. One unhappy customer wrote to us about an insurance company charging them a loyalty penalty worth hundreds of dollars, which they discovered when they logged in and applied for a new policy, receiving a quote that was nearly $500 less than the amount in their renewal notice.

Another consumer wrote to us when they found a major retailer offering interest-free credit that included expensive service fees that added up to hundreds of dollars over the course of the loan, far more than they would have paid in interest in the same period. Another wrote of an encounter with a well-known appliance company that failed to honour the consumer guarantees provided by the Australian Consumer Law, demanding the customer pay extra to have a faulty product replaced. Sadly, these stories are not out of the ordinary and continue to pour in, day after day.

When the costs of everyday essentials are biting so hard, it's even more important that companies do the right thing for their customers, that's why we'll keep fighting to make things better for consumers.

MARG RAFFERTY

IMAGES: GETTY

ASK THE EXPERTS

Got a niggling question our team can help with?

Q I bought an Ecosa mattress in December 2021 but for various reasons it is still in the box. Then I recently read somewhere that memory foam shouldn't be left rolled up. I contacted Ecosa and asked them if it would still be okay and they said no, it needs to be unboxed within six to eight weeks. I found it strange they never mentioned this, especially as I had been in contact with them at the end of December 2021 and again in March 2022. Their website does say they suggest you unbox it, but the way it is written implies that the reason is because the free trial starts from the day of delivery.

A CHOICE Customer Service: We're sorry to hear you've had this experience. You're right, generally speaking they should have mentioned that the mattress needs to be unboxed within six to eight weeks in their communications with you. However, because they do provide this information online and in the information booklet sent to you with the purchase, they are not legally required to advise you through their direct communications with you. Although there's no denying that it would have been much better customer service if they had. Unfortunately in this case, there's not much you can do.

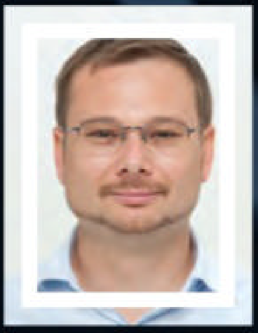
ASK US

Email your question to **asktheexperts@choice.com.au** or write to Ask the Experts, CHOICE, 57 Carrington Rd, Marrickville, NSW 2204.

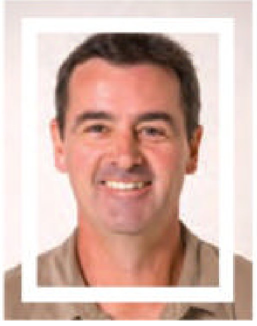
You can also tap into the 'brains trust' at **www.choice.community**.

Q Can terms and conditions include a statement that even though you have paid for a service, there is no guarantee that it is provided? I only read the terms and conditions for Melbourne Airport's long-term car parking after I had booked and paid for a two-week stay. It included the statement: "Melbourne Airport does not guarantee the availability of car park spaces in car parks (the allocation of car park spaces may be exhausted from time to time and certain car parks may not be available)". I arrived to find not only was the long-term carpark full, there was no space in the short-term parking either (which was offered to me as their apologetic "upgrade"). My only option then was to drive into Melbourne, leave my car with a friend, and take a taxi back to the airport. The extra journey took another hour and I nearly missed my flight to London. I have requested, and received, a full refund. But my point is that I was surprised, frustrated, and inconvenienced. Can companies be forced to make public the frequency with which events like this occur so that travellers can enter into arrangements with eyes open?

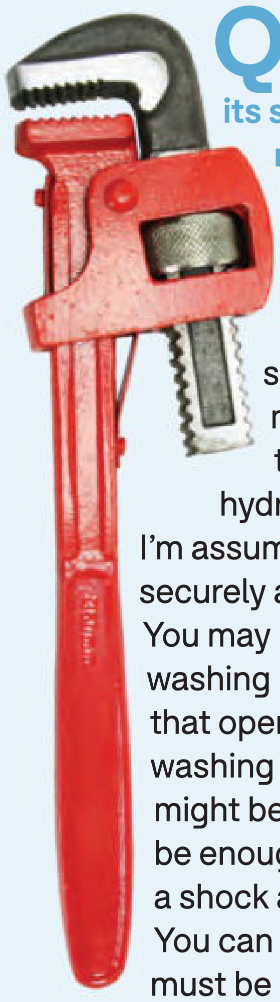
A CHOICE travel expert Jodi Bird: This kind of practise seems commonplace in the highly concentrated markets of airlines and airports. Our understanding is that as long as it is in the contract, i.e. the terms and conditions, they can reserve the right not to guarantee a service. Airlines, for example, don't guarantee their timetables. The ACCC does regularly release an airport monitoring report that includes details about car park performance. It might be worth suggesting to the ACCC that they include reporting of car park spaces used up as a percentage of capacity. It might make for some interesting content for organisations such as CHOICE to look at in future.



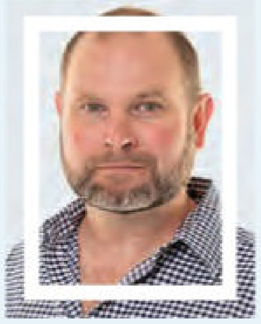
Q Is there a 'reasonable life' concept for rechargeable batteries other than warranty? Rechargeable batteries are now very common in the home and can be quite expensive. It's disappointing that a battery I paid $289 for and used rarely on garden tools has lasted only a little past its three-year warranty. I would expect a rechargeable battery in a domestic situation to last at least 10 years. What can be done, if anything, if the seller will only honour the warranty?



A CHOICE expert Denis Gallagher: From our research it would seem that between three and five years is an acceptable usable life for an NiMH rechargeable battery. This is taking into account other limitations stipulated by each brand on the number of charging cycles. Other battery types such as lithium (Li-ion) non-rechargeables last longer – around 10–12 years, but the unacceptably poor battery technology that we had to deal with several years ago is still causing issues today, as a mountain of legacy NiMH and even NiCad batteries work their way through to their end of life. The situation will improve as rechargeable lithium batteries become more prevalent.



Q I have an LG front-loading washer that is about five years old and causes terrible water hammer during its start-up process. I want to replace it – can you recommend a front loader that doesn't cause water hammer?



A CHOICE washing machine expert Ashley Iredale: As you've probably identified, it sounds like the valve in the washing machine is closing suddenly, leading to a sudden pressure surge or hydraulic shockwave in the pipes. I'm assuming the pipes aren't fixed as securely as they could be, so they are banging around as a result. You may not have experienced water hammer with your previous washing machine if it had a lower flow rate, and/or an intake valve that opened or closed more slowly. But that's not to say your new washing machine has 'caused' the water hammer. One option might be to get a water hammer arrestor installed, which could be enough to alleviate the problem for you. This is basically a shock absorber for this sudden burst of hydraulic pressure. You can buy one from a plumbing supply store, but installation must be done by a licensed tradesperson.

IMAGES: GETTY

YOUR SAY

If you've had a bad experience, been ripped off or scammed, tell us and help other CHOICE members avoid the same traps. If you've had a great response to a complaint you've taken to a manufacturer or retailer, our members want to know about that too! Letters may be edited for length and clarity.

CONTACT US!

Email us at **yoursay@choice.com.au** or write to Your Say,
CHOICE, 57 Carrington Road,
Marrickville, NSW 2204.

Temporary toaster

Just over two years ago I bought myself a Breville smart toaster. It was quite expensive – three or four times the price of a basic toaster, but I liked the extra features it had. Until recently I have been very happy with it, but a few weeks ago (just a few months outside the two-year warranty) it started misbehaving intermittently.

I called Breville customer support but they said because spare parts were not available for that model, they couldn't look at it, and as it was out of warranty they couldn't help me.

I had thought that by buying a more expensive toaster I would get a quality product that would last many years, but it seems that is not the case. The Breville website says "Breville is a design-led company", but from my experience, obviously not a very good or reliable design! But my biggest gripe is that when something goes wrong it's not repairable, and has to be consigned to the tip.

Brian Beavan, Fairlight, NSW

CHOICE says: Even if the toaster is out of warranty, you may still be protected under the consumer guarantees of the Australian Consumer Law. If the product has a major problem you can request a replacement or refund. If it's a minor problem, the business can choose to give you a free repair instead of a replacement or refund. Manufacturers are responsible for ensuring that spare parts and repair facilities for products are available for a reasonable time after purchase (unless you were told otherwise). You can read more about your rights at **choice.com.au/refunds**.

Over 10 years ago I purchased a Giant Anthem 29er mountain bike. Giant offers a "lifetime frame warranty". As far as I know, it's the only bicycle brand to offer such a warranty in Australia.

Recently, the frame cracked right through. The original supplier of the bike was no longer a Giant bicycle dealer, so I went to Ivanhoe Cycles in Heidelberg Heights in Melbourne. Due to the age of the frame, Giant were unable to supply a replacement frame, and due to the changing configurations of mountain bikes, a current model frame was not compatible with the existing equipment on the old bike.

After two weeks, Ivanhoe Cycles contacted me to let me know that Giant Bicycles Australia had offered me a new bike! They have truly lived up to their commitment of a lifetime frame warranty. A big thumbs up to Giant Bicycles and Ivanhoe Cycles. Excellent customer service.

Cameron Martin, Warrandyte, Vic

In 2018 I purchased a Westinghouse 605L French-door fridge-freezer. The door handles are attached by something called a "pedestal kit". Unless the doors are opened very carefully (it's a three-door model), the plastic pedestal block can break.

These blocks are the weak point of the fridge and replacements were about $40 to $50 for two, required for each handle, but they are no longer manufactured so there is no supply.

The only fix is to buy a complete handle, which includes the blocks in place, but is well over $200.

The fridge itself performs as expected, but I am very disappointed that Westinghouse doesn't support their product and would advise *CHOICE* readers to exercise caution when buying a refrigerator that uses this method to attach the door handles.

John Blakey, Hillarys, WA

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CHOICE SOCIAL MEDIA

Join the conversation online. We're on Facebook, Twitter, Instagram and our own forum, CHOICE Community. This month: potatoes, home coffee-making, cereal and more.

Community

choice.community

What's happened to potatoes? Over the last few years supermarket potatoes have changed. If you boil them they stay quite hard but the outer layer breaks away with the skin, and cooked for a minute too long they disintegrate altogether!

@phb: It is likely that your potato seller has changed varieties and they may not be suited to the cooking methods you use. This could be due to the current temporary potato shortage resulting from weather in the spring and early summer last year, due to their supplier changing variety for some reason, or a new supplier with a different variety being supplied.

@Gregr: Most of the potatoes in supermarkets these days are of the starchy or floury characteristics that are good for nothing more than mashed potato or perhaps baking. I try to seek out waxy potatoes like kipfler or Nicola, or as an in-between Dutch cream if doing potato salad or casseroles, or just plain boiled, because they don't fall apart.

Facebook

@choiceaustralia

What are your tips for making better coffee at home?

Rob B: Use instant coffee and wash out cup beforehand if feeling fancy.

Hirdie M:: Marry a self-taught barista.

Alison F: Buy a second-hand Moka Pot for $10 and use it on a stovetop. Makes the original and best espresso.

Twitter

@choiceaustralia

What's your favourite breakfast cereal and why?

@DJobling: Toast. Because it is easy and quick.

@jasemurphy: Corn flakes, but let me tell you, the Aldi ones are far better than the Kelloggs. 1. You usually get intact flakes in the box, not crumbs and nonsense. 2. They stay crunchy longer in the milk.

@yolly22: Coco Pops. With Milo on top.

@Trapperbear: Porridge, Scottish recipe with a pinch of salt, no sugar, cold milk, every day for 60+ years. Great source of fibre and rarely need lunch.

Instagram

@choiceaustralia

Is it worth reviving your old iPod Classic?

cdavies7052: I actually looked for an iPod to buy a few months ago. I'd rather a little Nano at the gym instead of a phone. Far less distracting.

mtooh56: I have two digital Sony Walkmans. Fantastic sound and storage capacity. I use them every day.

balmain2041: I love my iPod

shmoople123: iPhone 3 is kickin'! ■

JUNE
30
THE EOFY ISSUE

Big brother is shopping

Surveillance, personalised pricing and other practices are changing our shopping experience. **Jenny Baldwin** explains

Thinking about heading to the mall this sale season? Whether you're someone who loves to shop or begrudges the experience, it's worth knowing what retailers are up to in the quest to capture our hearts, minds and wallets. More and more, 'retail tech' is being used to help businesses understand what makes us tick. And while most of us are aware that our online movements are tracked, the way technology is used to monitor us when we shop at bricks and mortar stores is something many are not aware of.

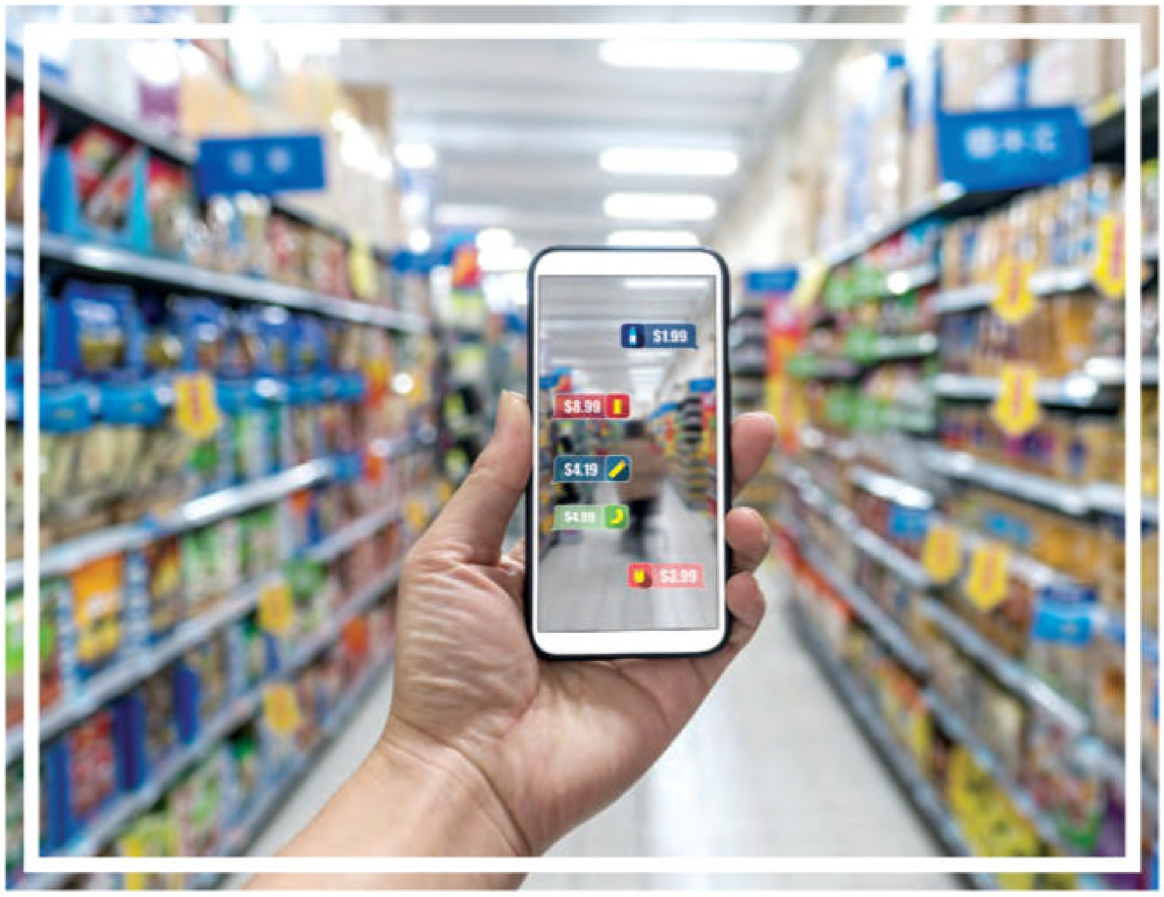
Beacons, wayfinding, electronic pricing and streamlined checkout are a few of the retail tech trends that have already reached our shores or are coming soon.

To better understand these technologies and how they might influence our behaviour, we spoke to Jana Bowden, professor of marketing and consumer behaviour, and chair of ethics, at Macquarie University; Billy Sung, professor of consumer psychology and neuroscience at Curtin University; and Suelette Dreyfus, a senior lecturer at the University of Melbourne's School of Computing and Information Systems who does research in digital privacy and security.

NEED TO KNOW

- Consumers are being tracked and recorded in retail spaces, often without their knowledge.
- Personalised pricing leaves consumers open to discrimination, both online and in physical stores.
- Electronic shelf labels, AI and RFID technology will transform how we shop and check out.

We also look at what the trade-offs are for consumers as we enter an era of convenience and hyper-personalisation. A lot of retail tech relies on tracking people's phones, on data collection and analysis, and on AI-generated decisions about what we might like and what we should pay for it. As always, there are winners and losers.



Tracking your movements

The placement of beacons inside shops and shopping centres is now commonplace. Beacons are devices that can emit Bluetooth signals and can be used to track your movements.

How does that work? Well, most of us leave Bluetooth enabled on our phones without even thinking about it. And that's all that's needed for your phone to find the beacon.

As Sung explains, you don't need to have the shop app open. As long as Bluetooth is enabled, a smartphone sends out 'pings' in search of a Bluetooth network, and the beacon detects these.

Once your phone has connected with the beacon, it can track the phone's movements (within a certain range) and may trigger a notification or in-app message, depending on the apps and settings on your phone.

"Beacons give retailers a general sense of where people are moving within the store," says Sung. This information helps them make decisions on shop layout and merchandising.

Another method is Wi-Fi tracking. Phones with Wi-Fi enabled may be detected by a tracker device or Wi-Fi access point. "Most large shopping centres have that technology," says Sung. "They use it to assess traffic flows ... and set the rent."

Phones with Wi-Fi enabled may be detected by a tracker device

For Suelette Dreyfus these are just some of the ways we've become less anonymous as we shop. "They're able to track you through the Wi-Fi network ... they will know what stores you go into, where you linger. Similarly, Bluetooth beacons ... might be tracking you as well and could have access to other information including certain transactions you might have made. That could be correlated with your movements in the shopping mall and how long you spent at a particular store."

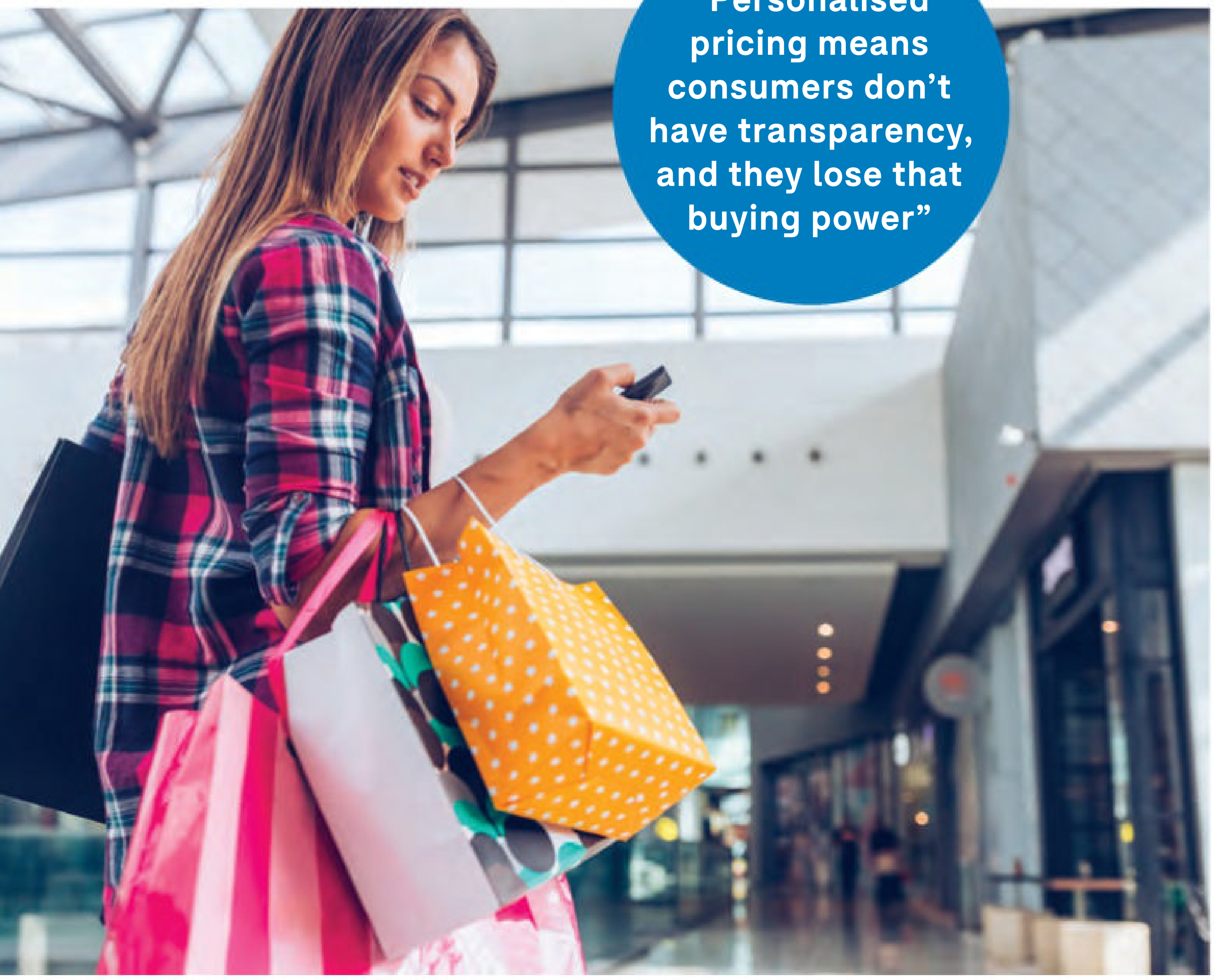
Wayfinding and proximity marketing

Beacon technology becomes more personal if you have the retailer's app on your phone. Now it might offer you use of the store map, and show you where to find the products you normally buy. You might receive nudges about discounts and special offers, and maybe messages relating to the products that you're standing next to. This is what's known as 'proximity marketing'.

Sung takes the example of moving through supermarket aisles with the store app enabled. A beacon detects when you're near the cereal aisle, and the store knows what your favourite cereal is, based on your purchasing history. So, you receive an alert on your phone that there's a discount today on that cereal, and the app indicates which shelf it's on.

"Big brands have had great success with beacon technology," says Bowden. "More tailored promotions means more consumer engagement, which in turn fuels more sales. From a consumer psychology perspective, proximity and wayfinding marketing have the effect of making consumers feel that the brand has a social presence in their lives. It makes them feel valued, wanted, and rewarded. And receiving a discount on your phone at the moment of purchase is a psychological trigger to spend." ▶

IMAGES: GETTY



> **“Personalised pricing means consumers don’t have transparency, and they lose that buying power”**

Loyalty and personalisation

The next step up from targeting you with special messages and discounts based on *where* you are, is offering you special deals based on *who* you are.

This already happens to some degree. Think about the offers you get through supermarket loyalty programs, such as ‘spend this much over this many weeks to get this much off your shop’.

The details about how much you have to spend to secure what size discount will have been worked out by a computer algorithm. It’s personalised to the extent that it’s based on your past purchasing history (and whatever else the supermarket knows about you).

However, as tracking technologies and data collection ramp up, so will the ability to create highly personalised marketing. That includes different prices for different people – personalised pricing – as well as dynamic pricing.

Dynamic pricing is when prices jump around in response to supply and demand. For example, the cost of plane tickets changes constantly, depending on how many people are searching for that route, in conjunction with a myriad of other factors.

Bowden says, “Big brands like Amazon already use dynamic pricing by relying on their algorithms to harvest and process real-time data on customers, as well as their supply chains and inventory levels, and then customise offerings to consumers loading up their online carts.”

“With personalised pricing, retailers use harvested customer data to understand an individual’s needs, and then offer them a personalised price deal. The underlying principle is that loyal consumers might get a better offer than new consumers ... much like a loyalty reward delivered on a one-on-one basis.”

Electronic labels and dynamic pricing

Personalisation will be further enabled as technologies such as electronic pricing are implemented. The paper and plastic stickers that we’re used to will be replaced with little screens displaying the barcode, product name, price and any discount information.

Sung says that when paired with beacon technology, wayfinding and usage of the store app, the combination of personalised and dynamic pricing becomes a possibility.

So, taking the example of buying cereal, the discount being offered by the store to a segment of its customers – say, loyalty members using the store app – might be augmented with a personalised deal, signalled via the app or shelf labels, which can change as you move closer or further away.

It’s a big investment for a business to adopt this kind of retail tech, especially if it has a huge amount of stock – Woolworths says it needs tens of thousands of electronic shelf labels per store to implement digital pricing. Coles is also going digital in certain aisles of some of its stores, starting with the Southland Victoria store that opened last year.

The benefits for retailers are long-term. They include a new way to deliver highly personalised marketing messages and pricing, and the ability to update labels in one fell swoop.

Kate Bower, consumer data advocate at CHOICE, says we need to start having discussions about differential pricing because a lot of the foundations of consumer protection and consumer law are based on the idea of fair and transparent pricing, and giving consumers choice.

“Personalised pricing means consumers don’t have transparency, and they lose that buying power,” she says. “There’s huge potential there for discrimination and inequality. If some people are paying less, that means some people are paying more.”

RFID and AI-assisted checkout

Another innovation for labelling and mapping inventory is RFID tags. RFID stands for radio frequency identification, and it's an old, widely used technology.

For retail use, tiny microchips with a product identifier and sometimes other information are embedded into individual tags.

Bowden explains, "RFID tags give retailers X-ray-like vision to see how much stock they have in real time, and where the stock is best displayed to gain attention. Are customers picking up the product, moving it to change rooms, abandoning it or buying it? If they're buying it, what are they buying it with?"

Like digital pricing, RFID tags require a large up-front investment. But it's worth it for some retailers, with the ability to track merchandise and ultimately save money on the cost of ordering and pricing stock, and staffing the checkouts.

And will staffed checkouts be around for much longer? It's hard to tell. Supermarkets do seem to be investing more in self-checkout technology. Woolworths has implemented AI technology and cameras at the self-checkouts, which it says are to help reduce mis-scans and speed up the checkout process.

RFID checkouts are relatively new in Australia, but already are making purchasing products a lot simpler. At some retailers, you drop all your purchases in a holder at the checkout, where an RFID reader instantly reads all the tags. Up flashes a list of items and prices, you hit 'accept', swipe your credit card and you're done.

Checkout-free supermarkets are also being trialled by big chains

Meanwhile, Amazon has abolished checkouts altogether with its Amazon Go stores in the US and UK. You scan the Amazon app on entering, then grab what you want from the shelves and walk out. Your credit card is charged, and a receipt appears on your phone. In the UK, checkout-free supermarkets are also being trialled by big chains like Aldi, Tesco and Sainsbury's.

Surveillance and facial analysis

Easy checkout and personalised deals might sound pretty good. But the trade-offs for consumers include an environment of increasing surveillance and data collection that we're often not even aware of.

Take the digital billboards dotted around shopping centres. Some of them are not just showing you advertising – they may also have a camera inside watching you. From the image, an algorithm estimates your gender, age, whether you have facial hair or glasses, your position and number of glances, before serving up what it deems to be a suitable bit of advertising. As it plays, the camera analyses your face to work out your mood while you were watching.

"One of the dangers of this, aside from the fact that it's incredibly intrusive ... is that there's often a pseudoscience to this stuff. Marketers might say they can determine your mood and reactions, maybe that's true and maybe it's not. But you certainly wouldn't want to have important decisions made about your preferences based on how accurate a marketing company's reading of your face is," says Dreyfus.

The technology being used is behavioural analysis or facial analysis, not to be confused with facial recognition technology (FRT). The latter captures biometric data and is used in settings such as airport security and policing. It has also been used in Australian retail, though this was paused following an investigation by CHOICE.

Bower says the science is wonky, but with facial analysis, marketers claim they can assess people's sentiment, whether they're happy or sad or angry or frustrated. "It's one of the many ways we're being surveilled without our knowledge."

So, how can that be legal? The problem, says Bower, is Australia's Privacy Act, which is currently under review.

Data collection and monetisation

"The Privacy Act was developed in the 1980s when many of these tracking ▶

ID : 462578624
FEMALE
BLOND HAIR
RELAXED
BAG

IMAGES: GETTY

technologies didn't exist," says Bower. "Also, the types of personal information that were considered in need of legal protection were quite narrow. The information you gave was name, address, and maybe phone number. The law didn't have in mind the kind of information that can be collected now."

And that information can far exceed what you give at the time of signing up to a loyalty program or shop app. Retailers can buy extra information about you from data brokers, and that can extend to your online browsing history, things you've bought on other websites, views you've expressed on social media, and even how 'influential' you are. They mash all this together to work out your value to them as a customer, and what kind of deals you should be offered. The law around this is not entirely clear, so some companies argue that these methods of collecting and using your behavioural information are currently excluded from the Privacy Act.

It's worth noting, too, that in the data soup, your name is not actually that valuable. "It's your behaviours that are valuable," says Bower. "What you buy, where you buy it and when you buy it.

"A business might say it doesn't sell your data, but what they do is use your data, your purchasing history, to generate insights that they can sell," Bower explains. "For example, people who buy pet food on Thursday nights also do x, y and z. It's the detailed behavioural insights about groups of people that generate the value."

The big retailers with their huge loyalty program memberships hold a wealth of this information on consumers, while consumers know very little about retailers. The power imbalance is huge.

"Businesses are making millions," says Bower. "The consumer gets maybe a free frypan or a $10 discount."

One of the recommendations of the Privacy Act review is to expand the wording about what constitutes personal information, from information *about* a person to information that *relates to* a person. "That alone will help to clarify that things such as telephone metadata are protected," says Bower. "But we also need the law to clearly include things like digitally tracking people so that a retailer can track, profile and target a person without necessarily knowing their name," says Bower.

"Consumers' expectations are that you shouldn't have a business being able to track you secretly around shopping centres or access your web browsing history or Facebook profile, and then use that information to advertise to you or manipulate your purchasing behaviour."

The future

While it's easy to see why retailers might be excited about the innovations in tech that have the potential to make their businesses more profitable, Bowden says that as customers become aware of retail tech innovations, research shows they are resistant to it. "Only eight percent of Australian consumers say they are very willing to share their location data with retailers.

"Consumers are also deeply concerned about their privacy and the collection of data on their personal movements, especially if they perceive that this information will be used opportunistically by brands looking to exploit the data."

CHOICE research backs this up. In January 2023 our nationally representative survey found that 64% of people are concerned about businesses collecting data about them, and 56% are concerned their data will be used to personalise advertising or marketing.

As it stands, consumers have little understanding and even less say in how the data collected as they shop is used. "As you walk through the shopping mall you can't control the information that is being gleaned about you and passed on to other people. You don't even know about it, let alone control it," says Dreyfus.

It's also hard to opt out of tracking and data collection. "Realistically, most of us won't bother turning off Wi-Fi or disengaging with loyalty programs as long as they're offering us extra value and discounts," says Bower. "The best thing consumers can do is write to their elected representative, and ask for new and amended protections under the Privacy Act." ■

Bag a sustainable bargain

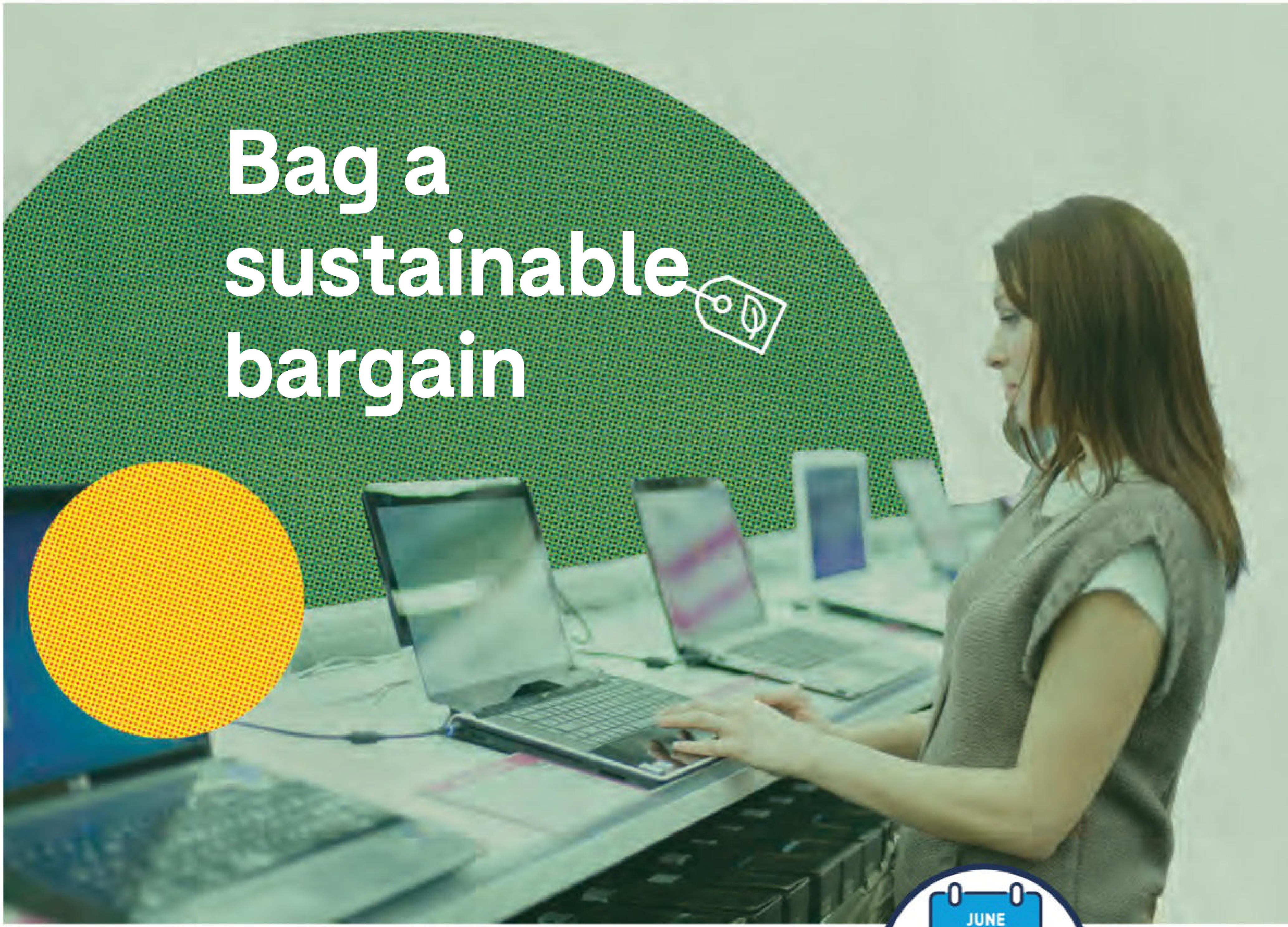


IMAGE: GETTY

JUNE 30 THE EOFY ISSUE

Liam Kennedy explains how to avoid sale fails and make sure your bargain isn't burdening the planet this EOFY

They may live in the shadow of their Boxing Day cousins, but the end of financial year (EOFY) sales are a big deal in Australia. The discounts that start popping up in the last two weeks of June regularly get shopaholics salivating, with retailers banking on the sales bringing in billions.

The lead-up to EOFY sale season is a busy time for CHOICE, too, with our experts sharing armloads of advice on how you can have a satisfactory and sustainable shop.

So, whether you're looking for the deal of a lifetime or a just-in-time-for-tax purchase this June, read on for our best tips for making your EOFY splurge better for you – and the planet too.

1 Be prepared

You don't have to wait until the end of June to start bargain hunting. Check in on your favourite retailer's website, follow them on socials, and sign up to their newsletters to get advance notice of any deals before they start advertising more widely.

This is also a good time to start making a list of all the things you need, and thinking about a budget. Doing this will help you avoid winding up with a case of buyer's remorse or getting caught in any debt traps. It will also help you to avoid getting sucked in by big discounts on items that you don't really need. ▶

2 Do your research

CHOICE experts regularly review the most sought-after products in EOFY sales, from heaters and TVs to ovens and coffee machines. If you know what you're after, check out our reviews in past magazines to know what to get and what not to.

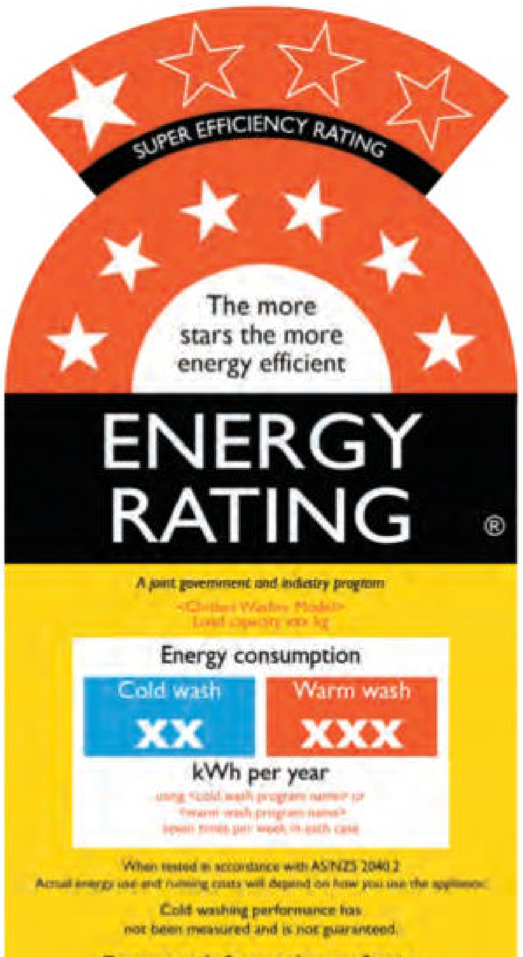
Just because an item is on sale, doesn't mean you're getting the best price. Compare different retailers' sites with the recommended retail price on our reviews to see who's really offering the best discount.

3 Avoid power-hungry products

Don't let your EOFY bargain come back and bite you in the form of a bloated energy bill. Take some time to consider the most energy-efficient option for each of the products on your EOFY wish list.

Using energy rating stickers as a guide is a good start. But you can find out exactly how much could be at stake in dollar terms by comparing the running costs of appliances we've tested.

Choosing a more efficient dryer, for example, instead of a poorer-performing model, can save you more than $130 in yearly power bills, as well as reducing emissions.


SUPER EFFICIENCY RATING
The more stars the more energy efficient
ENERGY RATING
®
A joint government and industry program
Energy consumption
Cold wash
XX
Warm wash
XXX
kWh per year
When tested in accordance with AS/NZS 2040.2
Actual energy use and running costs will depend on how you use the appliance.
Cold washing performance has not been measured and is not guaranteed.

4 Check ethical credentials

Shopping on autopilot and letting yourself get pulled along by bargains can lead to your dollars going towards some brands with less-than-stellar environmental and social credibility.

To avoid supporting poor practices, check the ethical ratings featured in many of our product reviews. These ratings are brought to you by Shop Ethical, an independent, non-profit organisation that digs into brands' social and environmental impact. When buying clothing and homewares, you can look for ethical and sustainable labelling, backed up by third parties.

5 Recycle your old goods

Here's some good news if you're looking to replace your household appliances this EOFY – many of them are recyclable. The bad news is that you may have to go out of your way to make sure your older, bulkier items get a sustainable send-off and don't just end up taking up space in landfill.

CHOICE experts recommend letting someone else do the hard work for you by finding a retailer that will take your old goods away for recycling when they come to deliver your shiny new ones.

If this isn't an option, check out Planet Ark's recycling directory (recyclingnearyou.com.au), ask your local council if you can recycle via their collection scheme, or even consider if your item has value as scrap metal. You may also be able to repurpose your old tech products when you upgrade to a newer model. See 'Old tech, new tricks' in *CHOICE* May 23 to find out how.

6 Make sustainable changes

Clearing the house of old workhorse appliances in anticipation of some new EOFY additions can also be an opportunity to make a few long-term changes for the better.

If your home essentials have packed it in, you can replace your faithful old fridge with a more-efficient model, or update your home entertainment set-up with a TV with a better power rating. This is also a good time to pay attention to the energy-efficiency ratings we give products like heaters in our reviews, to be sure you're making a worthy investment. For our complete guide to buying sustainable appliances see 'Green goods' in *CHOICE* May 23.

Just because an item is on sale, doesn't mean you're getting the best price

7

Buy as local as you can

Buying locally made goods helps save the planet from the heavier carbon footprint that comes with shifting products around the world.

Although this won't necessarily be an option for whitegoods and other appliances, it's worth considering for more bespoke items, such as clothing and homewares.

Also, while some of the biggest discounts can often be found at established chain stores, getting savings where you can at local outlets often means you're buying something that has been made more sustainably.

8

Question technology

Tech products are often at the top of peoples' lists when they go looking for an EOFY bargain. But before you get sold on a deal, there are a few things you should be considering.

These include what else you'll need to make your new device work in your home, and whether the item the store is trying to sell you is actually the latest model.

9

Try before you buy

A bargain is always better when it's for something you actually need, so it's a good idea to take a moment before you're sold on a purchase.

Clothing stores pretty much invite us to do this anyway by letting us try on new threads. Take advantage of this opportunity to make sure you're spending your money on something worth buying and not contributing to Australia's growing textile waste problem.

Bigger items are harder to try, but mattresses let you do this, with many brands giving you several months to sleep on your purchase (literally and figuratively). And while you can't usually try appliances before you buy, our experts do that for you. We put everything from TVs and fridges to prams and heaters through their paces in our labs so you can be sure you're not going to end up with a dud.

BUYING PRODUCTS THAT LAST

If cash is tight, sales time might be a good opportunity to buy a better quality item than would usually be in reach financially. Buying a high-quality product that lasts longer will not only save you money in the long term, it will likely be better for the environment too. However, high prices aren't always an indicator of quality. CHOICE testing repeatedly shows that cheaper products can outperform more expensive ones.

There are a number of ways to identify better quality and more durable products:

- Consider whether what you're buying is likely to be repairable, either by you or through a repair service. Some brands, such as Breville, Dyson and Kelvinator, have replacement parts and accessories readily available online, whereas others don't.
- Shopping for shoes, clothes and accessories instore lets you gauge their quality in person. Do the stitches, fastenings and zips look sturdy? Does the fabric have pilling or is it too thin? Is the sole of the shoe sturdy?
- Check where the item is made. Locally produced and handmade products may be of higher quality and ethical standards than those that are mass produced.
- Check what it's made of. Will the material biodegrade at the end of its life? Is it recyclable? Will it break easily? For instance, a solid wood set of drawers that has been well finished will probably last longer than something made of cheaper chipboard – and could save you money in the long run.
- Check product reviews and buyer feedback. CHOICE reviews can help you compare a wide range of products in your budget range. We rate products not only on performance, but also on energy consumption, running costs, water efficiency and reliability (depending on the product). Some products also include ethical and social gradings of manufacturers from Shop Ethical.

WENDY EVANS

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Claim eligible items on tax

Of course, no successful EOFY shopping spree would be complete without that second win that comes when you're able to claim your bargain purchase as a deductible expense at tax time.

Although these benefits only count on work-related costs, there's a whole range of tech products that you may be able to claim as work deductions, such as laptops, tablets, smartphones, routers, printers and portable storage. Find out more on p26. ■

IMAGE: GETTY

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Tax-time tech

You can reduce your taxable income by buying tech for work and keeping track of running costs. **Liam Kennedy** explains how

With the discounts coming thick and fast in the lead up to 30 June, it's a great time to pick up tech items for your home office that you can claim as a deduction on your tax return.

What you can claim

Unfortunately, tax deductions aren't exactly free money and they don't equate to a dollar-for-dollar reimbursement in your tax refund. Instead, they help reduce your taxable income, which is the figure the Australian Taxation Office (ATO) uses to determine how much tax you owe for the year.

For a cost to be deductible, it must meet the ATO's three 'golden rules', meaning you:

1. must have spent your own money on something that directly relates to you earning an income
2. can't have been reimbursed by someone else
3. must have a record of your spending, such as a receipt.

The good news is that if the item costs $300 or less, you can claim the full amount as a single deduction for the tax year in which you bought it. If you buy something that costs more than $300, such as a laptop, you won't be able to claim it all in one go. Instead, you'll have to claim

NEED TO KNOW

- Many brands and retailers cut prices on technology at the end of the financial year.
- The sales are a chance to pick up products you can use for work and claim as a tax deduction.
- The ATO website has guidance on how to claim running costs for working from home.

a proportion of the cost each year as the item depreciates in value over several years.

The ATO has guides on how you can do this by using one of its two recommended formulas, or you can use its depreciation and capital allowances tool. But you'll have to keep track of the product's base value and the effective life of the item. The tax office sets guidelines for how long various items are meant to last (two years for a laptop, for example) that you can use in your calculations.

It's also important to note that if the item you bought is for both personal and work use, you can only deduct the percentage that reflects how much you use that product for work. So, if you buy a $199 printer and use it for work for 50% of the time, you can claim $99.50 as a deduction. This rule applies whether you're claiming the deduction all in one year, or over a period of years.

The tax office's MyDeductions app is also a useful resource for keeping track of expenses. It's available for Android and Apple devices from Google Play or the App Store.

With tax time closing in fast, here's our handy guide to tech products you may be able to claim as a deduction.

LAPTOPS & TABLETS

If you spend more than $300 on a tablet or laptop that you use only for work, you can claim the depreciation over the following years. If you're also using it for private purposes, you'll have to calculate the split and claim the correct deduction, following the method outlined above.

For help choosing a new laptop, visit **choice.com.au/laptopguide**.

SMARTPHONES

Use your phone for work? You can claim a percentage of the cost at tax time in accordance with the method outlined previously.

To find out how to buy the best smartphone for your needs, read our smartphone buying guide online at **choice.com.au/smartphoneguide**, and turn to page 65 for our latest smartphone reviews.

ROUTERS & MODEMS

If you're setting up your home office and want all your gadgets to work fast and reliably, you'll need a fast wireless router for your home Wi-Fi.

Routers usually have a range of around 50 metres in line of sight, but obstructions like walls and furniture can shorten it. If you want to have a stronger signal at the edge of your Wi-Fi range, an extender or mesh network is what you're looking for.

The tax office sets guidelines for how long items are meant to last

For more on routers, mesh networks and extenders, and to understand what could work best in your home, head online to **choice.com.au/connectingtotheinternet**, and see our review of mesh wireless routers in *CHOICE* May 22.

PRINTERS

Printers often feature in EOFY tech markdowns, and whether you run your own business or work from home, having one of these office staples on deck can often come in handy.

But while it may seem like a simple piece of equipment, buying a printer can be confusing. Should you go for laser or inkjet? Do you need a multifunction printer with a scanner too? Are you being upsold to a more expensive model?

You can find our printer buying guide online at **choice.com.au/printerguide** for more advice on what could work best for you, and check out *CHOICE* Jun 22 for our printer reviews.

RUNNING COSTS

If you work from home, you can also claim any extra costs resulting from spending more time in your house – such as that inflated energy bill.

The ATO lets you claim a flat rate of 67 cents per hour that you worked from home to cover extra use of things like electricity and gas, as well as internet and mobile data.

Alternatively, you can calculate the actual cost you've incurred (if it's more than 67 cents per hour), but this will require lots of number-crunching and record-keeping, and you can't claim a second deduction by this method if you're already claiming that cost under the flat rate.

If you're making these sorts of deductions, you'll need records of how many hours you worked from home and evidence that you paid for the extra strain on your home facilities.

For specific information on how to process your working at home deductions, see the working from home expenses guide on the ATO website at ato.gov.au. ■

IMAGES: GETTY

Super shake-up

Super tax concessions are set to change in 2025. **Daniel Herborn** explains what this might mean for you, plus the benefits of topping up your super before 30 June

Assuming the proposed changes become law, on 1 July 2025, the concessional tax rate on earnings for super balances above $3 million will rise to 30%. Here's what you need to know about the changes.

How super investment earnings are taxed

Super earnings are taxed differently depending on whether you're in the accumulation phase (working and continuing to get super contributions from your employer) or retired.

WHILE YOU'RE WORKING

During the accumulation phase, the earnings on super are taxed at 15%. However, the Retirement Income Review pointed out that franking credits and capital gains discounts means the effective tax rate Australians pay is only 7%. This is a big discount compared to the 45% tax that high-income earners pay on income over $180,000 if the money isn't invested in super.

If you have a 'transition to retirement' account (which allows you to access some of your super while still working), you'll continue to pay the 15% tax rate on earnings.

Your super fund will automatically deduct this tax from your account – you don't have to pay it separately.

WHEN YOU'RE RETIRED

Once your superannuation is in the retirement or pension phase, you don't pay any tax on earnings. You can get your super when you move into the 'retirement' phase, but moving into this phase is more complicated than simply retiring from work.

You can move into this phase once you have

Earnings on super balances over $3 million will be taxed at 30% instead of 15%

satisfied a 'condition of release'. The main ways to do this are:

- reaching 'preservation age' (which is between 55 and 60 depending on when you were born) and retiring
- turning 60 and stopping work (even if you start working again)
- turning 65.

An important rule here is the transfer balance cap, which limits how much money you can move into these tax-free retirement accounts. On 1 July 2023, the cap will go up, meaning your cap is between $1.6 million and $1.9 million – you can view your personal cap in your MyGov account (see my.gov.au). If you have more than your relevant cap, you must keep it in the 'accumulation phase', the same as when you were working. You'll pay 15% on the earnings of this amount.

There are also minimum drawdown rates from these income streams. These rates help ensure the system works as intended, with people spending down their retirement income. Again, these rates differ depending on your age. You can find your relevant drawdown rate on the Australian Taxation Office website.

Proposed changes to super tax concessions

The federal government is proposing that from 1 July 2025 earnings on super balances over $3 million will be taxed at 30% instead of 15%. The tax won't apply to any earnings before this date.

People with more than $3 million in super will continue paying the lower tax rate on earnings below the $3 million threshold. For example, if you have $3.5 million in super, you'd pay the lower rate on the earnings of the first $3 million, and the higher rate on earnings of the $500,000.

IMAGES: GETTY

Estimates suggest this change will impact around 80,000 people. For context, Australians have approximately 23 million super accounts.

It's important to note that it's earnings on investments, not the balance, that's taxed. For instance, if you earn 7% on a $3 million super balance, you pay the tax on $210,000, not the full $3 million.

Despite some reports, there isn't going to be a 'cap' on super accounts – you can continue to add to your account above $3 million.

As with the current tax set-up, franking credits and capital gains discounts mean the effective tax paid will be lower than the listed 30%; it will be more like 22%.

A fairer system?

Super generally offers lower tax rates than other places you can keep your money. The highest rate for income tax, for example, is 45%, and most Australians are in the middle tax bracket, which is 32.5%.

The system offers tax discounts to allow people to build up income for use during retirement. But anti-poverty advocates have pointed out the concessions have gone far beyond helping people save for retirement and are assisting very wealthy people to pay less tax and pass on inheritances.

"$3 million is far more than anyone needs to fund a decent retirement, which should be the goal of superannuation – not tax avoidance or bequests for adult children," said the Australian Council of Social Service (ACOSS) when the changes were announced.

The independent Retirement Income Review found that super tax concessions predominantly help high-income earners and "increase inequity in the retirement income system".

"The changes would mean government support is better ▶

targeted to those who need it, making the system fairer," says Super Consumers Australia director Xavier O'Halloran.

Future impact of changes

There has been some commentary that the changes will impact more people over time as wages rise and more Australians accumulate more than $3 million in their accounts.

The $3 million threshold isn't set to go up over time. But even in the long-term, the impact of this change is fairly modest – Treasury projections found around 10% of people would pay the higher tax rate on some of their super if the threshold remains unchanged by 2052.

A recent analysis showed that super tax concessions would have cost more than the Age Pension by the year 2050 if they continued unchanged.

O'Halloran says long-term projections about the tax concessions need to be viewed in the context of whether the system is equitable and sustainable.

"The Retirement Income Review found that the top 10% of income earners receive more in government support than a person on the full age pension," he said. "The system gives a leg-up to people who don't need it."

How much super you need in retirement

Super Consumers Australia previously calculated that home-owning middle income earners need $258,000 in super (for a single) or a combined $352,000 (as a couple) to maintain their standard of living in retirement until age 90. These numbers are based on what retired Australians are actually spending and also assume you receive any income from the Age Pension for which you are eligible.

"Encouragingly, the research showed that retirees with this level of wealth were happy and didn't have elevated levels of financial stress," says O'Halloran.

> **"$3 million is far more than anyone needs to fund a decent retirement"**

Government urged to prioritise affordable housing

The government expects to raise about $2 billion in the first full year from the changes. The government has already flagged that it's looking for additional revenue to address growing expenditure pressures in defence, health, aged care and the NDIS.

O'Halloran says it's good that many of these measures are targeted at supporting retired Australians who are doing it tough, but there is one big priority missing – affordable housing.

"The rate of government rent assistance payments haven't kept pace with rising rental prices, leaving many retired renters in financial hardship. Caught between an inability to return to the workforce and out of control rents, people are trapped."

"The debate should now shift to how the government can support those retirees in the greatest need." ■

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Tax-deductible super contributions

After-tax contributions (also known as non-concessional or personal contributions) are when you choose to top up your super account (i.e. on top of the compulsory contributions made by your employer), either from any savings you have or from the wages you receive. These contributions can generally be claimed as a tax deduction, meaning they can help save you money on your tax bill.

You can make these contributions on a regular basis (e.g. after you get paid every fortnight) or as a one-off payment. One benefit of making after-tax contributions is that the government will match up to 50% of your contribution up to $500 for people on lower incomes. People who earn less than $57,016 (before tax) can get a government co-contribution of up to $500. You don't have to do anything to get this money; the tax office will pay it straight into your super.

There is a limit on how much you can contribute to your super after-tax. This limit is currently $110,000. You can claim contributions up to $27,500.

HOW TO MAKE AN AFTER-TAX CONTRIBUTION

Get in touch with your super fund for further details. You'll need to have your tax file number on record with your fund before you can make one of these contributions.

To claim these contributions as deductions, you'll need to complete the 'Notice of intent to claim or vary a deduction for personal super contributions' form, and send to your super fund for acknowledgment.

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CHOICE

Historical offences

In a case of the past coming back to haunt you, a customer from long ago found themselves caught up in the Latitude Finance data breach. **Andy Kollmorgen** investigates

NEED TO KNOW

- Australians have few rights when it comes to getting companies to delete our personal data.
- Customer records from as far back as 2005 were accessed in the Latitude breach.
- Our case study asks: 'How can companies be allowed to hold my personal information forever?'

Greg didn't know what to make of it when he received notification from Latitude Finance that his name, address, date of birth, phone number and driver's licence number had been accessed by cybercriminals.

It wasn't that the March data breach was so surprising – it was that he hadn't been a customer of Latitude or its predecessor company GE Money for a long time. Why had Latitude held on to his personal information?

"Initially, I thought it was a mistake, but eventually realised the credit must be associated with interest-free terms on a lounge we purchased about 20 years ago from Harvey Norman," says Greg.

GE Money customer data was passed along to Latitude as part of the deal

Breach worse than reported

Like other corporate data breaches, the Latitude breach turned out to be significantly worse than first reported.

The Australian financial services arm of GE Money was sold to investors in 2015, who renamed it Latitude Finance. GE Money customer data was passed along to Latitude as part of the deal.

When Latitude revealed the breach in mid-March, it indicated that the hackers had accessed about 330,000 customer records. In late March, Latitude raised that number significantly to 14 million, with many GE Money customer records going back as far as 2005 also caught up in the breach.

According to reporting by the ABC, the breach also affected some consumers who had previously taken out Coles-branded credit cards that were issued by GE Money, and may have also affected the former card issuer's Myer-branded cardholders as well.

Both the Coles and the Myer cards were partnered with Latitude for a time, but that's no longer the case.

LATITUDE

GE Money was also partnered with several other major retailers – including Harvey Norman, The Good Guys and JB Hi-Fi – and the majority of those relationships carried over to the Latitude Financial brand.

In its breach notification, Latitude acknowledged that people who applied for credit with a predecessor company were also affected. It means former and current customers of all these companies could be caught up in the data breach.

The problem with long-term data retention

"How can companies be allowed to hold my personal information forever?" asks Greg. Disturbingly, the answer is that Australians have very few rights when it comes to getting companies to delete their data.

In response to a complaint he lodged with Latitude, Greg was told that his data had been retained because the company was legally required to hold on to it. When we asked the company to explain, we were told that Latitude "is required by law to collect and retain certain personal information when customers apply for or open an account. Some of this information must be kept for several years after an account is closed".

"Latitude's data retention policies and practices are being thoroughly reviewed as part of the ongoing investigation of the cyber-attack," the spokesperson added.

A spokesperson for the Office of the Australian Information Commissioner (OAIC), which oversees the Privacy Act, told CHOICE that a business "must take reasonable steps to destroy personal information it holds or ensure it is de-identified if it no longer needs the information".

But the requirement applies "except where the business is required by law or a court or tribunal order to retain the personal information," the spokesperson adds. "For example, there are specific requirements to keep personal information for the purposes of anti-money laundering or taxation purposes".

Privacy Act review calls for change

How this exception applies to people in Greg's situation is not clear, and the lack of clarity around privacy rights has been under discussion among policymakers.

In the case of taxation, data is required to be retained for five years. With anti-money laundering, the timeframe is seven years. There is no law that CHOICE could find requiring the retention of personal data for up to 20 years or more.

"It appears from Greg's experience that businesses are interpreting data retention laws to benefit themselves at the expense of consumers," says CHOICE consumer data advocate Kate Bower.

"It may be a requirement to keep some personal information for up to seven years to comply with the law, but there is absolutely no good reason to keep this data for decades, exposing it to cybersecurity threats, as happened to Greg and many others."

Greg is particularly aggrieved that he'll have to deal with any fallout from the breach in his retirement.

"Retired people have a hard time getting credit, so it infuriates me even more that these people are holding on to my details," Greg says. "We haven't had credit from anyone in the last 10 years."

The final report on the review of the Privacy Act, released in mid-February this year, recommends that the federal government rethink the legal provisions that call for retaining personal data "to determine if the provisions appropriately balance their intended policy objectives with the privacy and cyber security risks of entities holding significant volumes of personal information", says the OAIC spokesperson.

There are also ambiguities in the Act when it comes to a business passing along customer data when it's sold to a new business.

According to the OAIC, a company "should only provide a prospective purchaser with personal information if the provision of that information is consistent with the vendor's obligations concerning the use or disclosure of the information" under the Australian Privacy Principles.

CHOICE supports reforms to privacy laws, including those covering data retention, as was recommended in the Privacy Act report.

"We also support the introduction of individual rights to request the deletion of their personal data, which would align Australia's privacy laws with world-leading legislation like the EU's General Data Protection Regulation," says Bower.

"But laws are meaningless without strengthening the powers of our privacy regulator, the OAIC, so it can hold businesses to account, which will be critical to protecting consumers from future data breaches." ■

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IMAGES: GETTY

The more the merrier?

You can insure your adult children on your health insurance policy, but as **Uta Mihm** and **Mark Blades** explain, there may be cheaper options

With many Australians feeling the pinch as the cost of living increases, more and more young adults are still living with their parents. And now they can stay on the family health insurance policy for longer too.

In 2021, the government increased the age cap for adult children on their parents' policy from 24 to 31. At the same time, the age limit was removed for dependants living with a disability (NDIS participants).

But if the young adult isn't a full-time student, parents will usually cop a significant increase in their premium. So as tempting as it might be, adding an adult child to the family policy isn't always the most cost-effective option.

Will it save you money?

THE ADDED COSTS OF AN EXTENDED FAMILY POLICY

While children and full-time students up to age 31 can often stay on the regular family policy for free, there is usually an additional cost to keep non-students covered. Depending on the insurer, this can add up to 30% to your premium and involves being switched to a policy with the same cover called an 'extended family policy'.

Given that a single policy usually costs about 50% of a family policy, it's smart to keep your kids on your family policy while there's no additional cost.

There is usually an additional cost to keep non-students covered

But once you need an extended family policy, it's time to carefully consider everyone's cover needs. If you're on a top cover policy it could become expensive, especially if you have a family income of up to $180,000 or higher and don't get the

NEED TO KNOW

- Bupa, Medibank, HCF, NIB and many smaller funds have increased the age cap for young adults on family policies to 31.
- While full-time students are often covered for free, you may have to pay up to 30% more if you want other young adults covered. This may cost more than taking out a lower cover standalone policy for them.

full health insurance rebate. If you are on a medium- to low-cover policy, your fund may not offer an extended family policy option. Also, some funds only allow combined hospital and extras policies.

YOUTH DISCOUNTS

If they take out their own policy, your adult dependant could be eligible for a higher rebate and a youth discount, with the highest discount available if they take out health insurance at age 25 or younger. They can keep the youth discount of up to 10% until they turn 41 if they stay on the same policy.

APPROPRIATE LEVEL OF COVER

If you're thinking about taking out an extended family policy it's important to consider whether the young adult in your family needs the same level of cover as the older family members. Older adults may have chronic health conditions or need cover for surgical procedures like knee replacement or cataract eye surgery, which is only available through expensive Gold-tier health insurance policies.

Healthy young adults may only need Bronze cover, which includes cover for broken bones, flu, and skin and breast cancer. This level of cover is significantly cheaper, so it may make sense to take out a standalone policy.

Extras cover may also be overkill for some healthy young adults. If they're only using it for dental check-ups and a few physio sessions now and then, they're better off paying as they go.

Do all health funds cover young adults on family policies?

The changes to the age cap are not mandatory for private health funds, but most funds have adopted them. Insurers are free to set different limits, ▶

Cover for people with a disability

While most funds have extended the age limit for student and adult dependants, cover for NDIS participants aged over 31 on their parents' policy is currently only available from one open insurer, Tasmanian-based HCI, and from three restricted membership funds: Police Health (includes Includes Emergency Services Health), Doctors' Health and Reserve Bank. There is no age limit if a policy allows you to add an NDIS participant.

IMAGES: GETTY

Case study: Family policy vs standalone policy

Let's look at the difference in premiums between family, extended family and standalone policies. Here's an example based on a family with Medibank Gold Complete ($750 excess) and Top Extras, earning $280,000 per year. They have a 25-year-old, non-student dependant named Ava who earns less than $90,000 a year.

ADDING TO FAMILY POLICY

Medibank covers adult children for free until age 21 and full-time students until age 31 on a family policy. Other adult children younger than 31 can be insured on extended family policies for an extra cost.

Cost of family policy: $7979*

Cost of extended family policy (including Ava): $10,010*

Additional cost to include Ava: $2031 per year (without the health insurance rebate).

BUYING A STANDALONE POLICY

If Ava has lower health cover needs, she could take out a standalone Medibank Bronze Everyday ($750 excess) and Essential Extras policy instead of joining the family policy.

Cost of standalone policy: $1276* per year (includes the health insurance rebate and a youth discount).

HOW THEY COMPARE

In this instance, a separate Bronze policy is more than $750 cheaper than a Gold-tier extended family policy. Policies from different funds will vary, so it's important to carefully consider your personal circumstances before opting for an extended family policy just because it's available.

*Annual premiums as of 1 June 2023 in NSW.

so while some funds only allow young adults on family policies up to age 20, others may allow them to stay up to their 32nd birthday. And some funds have extended the age for students but not non-students, or vice versa. Funds also have different conditions when it comes to dependants and family policies. Normally you can't be married or in a de facto relationship, but with some health insurers you also need to live with your parents and be financially dependent, or the insurer sets a cap on how much you can earn. There may also be a requirement to take out a combined policy, or the dependant may need to take out their own extras policy to be covered under their parents' hospital policy.

There are also differences in the definition of a full-time student (who can usually get insured for free), so it's important to check the individual policy for details. For example, Bupa excludes apprentices while Teachers Health includes apprentices, interns and cadets.

It's best to check with your fund and make sure you understand the rules.

Maximum age to be included on family policy

OPEN FUNDS	CHILD (FREE COVER)	STUDENT (FREE COVER)	NON-STUDENT (EXTRA COST)
AHM	20	30	30
AIA	17	24	24 (free)
Australian Unity	22	24	30
Bupa	20	31	31
CBHS Corporate Health	17	30	30
GMHBA	20	24	na
Frank	20	24	na
HBF	20	24	24
HCF	21	30	30
HCI	22	31	31
HIF	20	30	na
Health Partners	20	24	24
Hunter Health Insurance	20	24	na
Latrobe Health Services	20	31	31
Medibank	20	30	30
Mildura Health Fund	20	24	24
NIB (Qantas Insurance)	20	24	31
Peoplecare	20	24	24
Phoenix Health Fund	20	24	24
Queensland Country Health Fund (Territory Health Fund)	20	31	31
RT Health	21	30	30
St.LukesHealth	22	24	24
Westfund	24	30 (extra cost)	30

RESTRICTED FUNDS	CHILD (FREE COVER)	STUDENT (FREE COVER)	NON-STUDENT (EXTRA COST)
ACA Health Benefits Fund	20	24	30
CBHS Health Fund	17	30	30
Defence Health	20	24	24
Doctors' Health	20	31	31
Navy Health	21	24	24
Nurses & Midwives Health	20	31	31
Police Health (Emergency Services Health)	20	31	24
Reserve Bank Health Society	17	24	24
Teachers Health (UniHealth)	20	31	31
Union Health (TUH)	20	30	30

The cheapest basic health insurance policies to save on tax

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If you don't need health insurance for the actual cover it will provide you, you might choose to buy the cheapest policy available simply for the tax benefits. The end of the financial year (before 30 June) is a good time to consider this strategy if you haven't already. Our experts have reviewed all the basic health insurance policies available in Australia to find the cheapest options to suit people who only want health insurance for tax reasons.

WHAT ARE BASIC HEALTH INSURANCE POLICIES?

Basic hospital insurance policies offer the lowest tier of health cover at the lowest price point. All Basic policies must cover treatment in a public hospital for rehabilitation palliative care, and psychiatric care.

These policies are good for avoiding tax and loadings, but they provide very little cover, so we don't recommend them for health cover.

If you want a higher level of hospital cover, look for Bronze, Silver or Gold hospital insurance. Read more at **choice.com.au/cheapestbasiccover**.

Financial incentives for health insurance explained

The government has come up with a few carrots (or are they sticks?) to encourage people to take out private health cover, depending on your age and income.

LIFETIME HEALTH COVER

For every year you don't have hospital insurance on 1 July following your 31st birthday, you'll pay a Lifetime Health Cover (LHC) loading of 2% of your hospital cover premium up to 70% (extras cover isn't needed). After 10 years of continuous cover the loading will be removed.

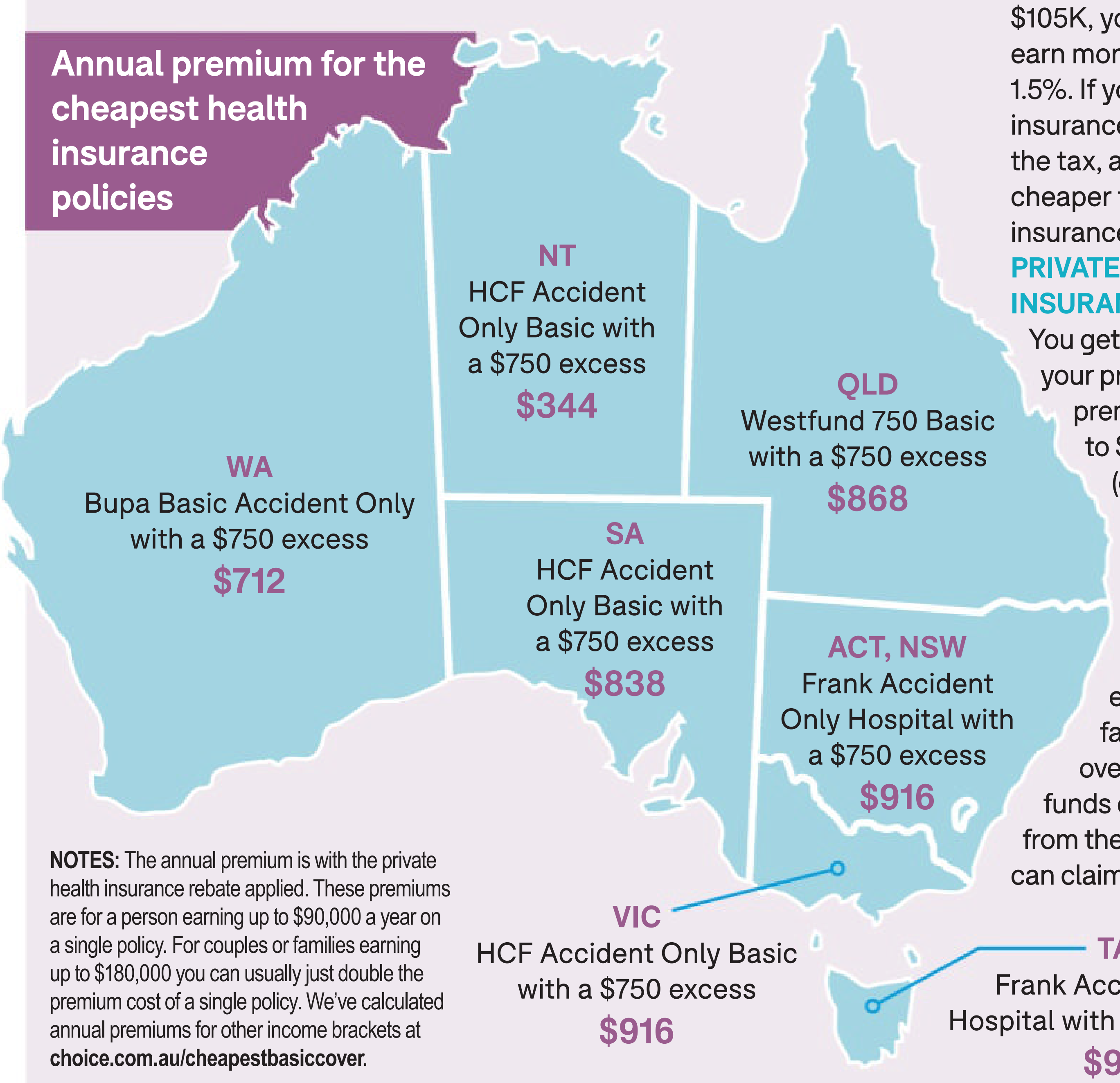
MEDICARE LEVY SURCHARGE

A 1% tax applies on your income if you don't have hospital insurance and you earn more than $90K as a single (or $180K for couples and families). If you earn more than $105K, you pay 1.25% and if you earn more than $140K, you pay 1.5%. If you take out hospital insurance, you're exempt from the tax, and in many cases it's cheaper to pay for hospital insurance than to pay the tax.

PRIVATE HEALTH INSURANCE REBATE

You get a 24.6% rebate on your private health insurance premium if you earn up to $90K a year as a single (or $180K for a couple or family). For singles earning above $90K, the rebate steps down incrementally until it reaches 0% for people earning over $140K (or families or couples earning over $280K). Often health funds deduct the rebate directly from the premium, otherwise you can claim it at tax time. ■

Annual premium for the cheapest health insurance policies


NT
HCF Accident Only Basic with a $750 excess
$344
QLD
Westfund 750 Basic with a $750 excess
$868
WA
Bupa Basic Accident Only with a $750 excess
$712
SA
HCF Accident Only Basic with a $750 excess
$838
ACT, NSW
Frank Accident Only Hospital with a $750 excess
$916
VIC
HCF Accident Only Basic with a $750 excess
$916
TAS
Frank Accident Only Hospital with a $750 excess
$939

NOTES: The annual premium is with the private health insurance rebate applied. These premiums are for a person earning up to $90,000 a year on a single policy. For couples or families earning up to $180,000 you can usually just double the premium cost of a single policy. We've calculated annual premiums for other income brackets at **choice.com.au/cheapestbasiccover**.

IMAGE: GETTY

Safe travels

Securing travel insurance when you have an existing medical condition can be tricky. **Jodi Bird** explains

Travel insurance is essential in the case of illness or injury while travelling. Overseas medical costs can be extortionate. And if you have an existing medical condition, it increases the chance you may need medical attention on your trip – that's why insurers charge you extra.

So if you can get cover for your pre-existing medical condition, it'll take a bit of worry out of your trip. But even if you're willing to pay extra, getting cover for an existing condition isn't always easy.

What is a pre-existing medical condition?

A pre-existing medical condition is a medical condition that you had before you bought your travel insurance.

Different travel insurers will have their own specific definitions, but it's usually a diagnosed medical condition that you've had or received any form of medical advice, treatment or medication for, in a specified time period before you bought your policy.

The 'specified time period' wording is worth paying attention to.

The insurance contract regulations set the time period as six months by default. Unfortunately, insurers can get around this six-month rule and exempt themselves simply by burying an exclusion or limitation in the product disclosure statement (PDS).

Insurers' definitions vary as to what the specified time period is. Most insurers would cover a condition if it hadn't led to treatment in the one to two years before you booked your trip, but others may specify five years or longer.

> The insurance contract regulations set the time period as six months by default

NEED TO KNOW

- You must declare a pre-existing medical condition if you want it covered by insurance.
- Insurance cover for pre-existing medical conditions varies widely.
- You may have to pay more to get cover for your pre-existing medical condition.

What's covered, and what's not

There's often a lot of hoops to jump through to get cover for pre-existing conditions.

Insurers can:

- exclude pre-existing medical conditions altogether
- include a list of accepted pre-existing medical conditions (specified in the PDS)

- only cover some symptoms, or restrict cover for generally accepted conditions depending on other conditions you might have. For example, allergies may be covered, but not anaphylaxis.
- subject you to an assessment for cover of your medical condition and charge a fee to complete this assessment (whether you get cover or not)
- deny you cover for a medical condition on application.

Even if you survive that minefield, you may then have to fork out several thousand dollars for the privilege of getting cover for your condition.

COMMONLY COVERED PRE-EXISTING CONDITIONS

- Acne
- Allergies
- Asthma
- Blindness and low vision
- Cataracts
- Corneal graft
- Coeliac disease
- Deafness
- Dermatitis
- Ear grommets
- Eczema
- Gastric reflux
- Gout
- Hiatus hernia
- High cholesterol/ hypercholesterolaemia
- High blood pressure/hypertension
- Hip replacement
- Knee replacement
- Macular degeneration
- Menopause
- Underactive thyroid/ overactive thyroid ▶

IMAGES: GETTY

Seniors with pre-existing medical conditions

Older and wiser travellers with pre-existing medical conditions can still get travel insurance for their international travel. The drawbacks are that you'll have fewer policies to choose from, and you'll pay more for them.

Many travel insurance policies have age limits, over which they either don't offer cover, or they may offer restricted cover with lower benefit limits or a higher excess.

Our analysis of premiums across age groups shows that an older single traveller going to Bali for around 11 days to two weeks will on average pay more for their cover as they age, with premiums generally increasing more noticeably from age 50.

In particular, travellers aged over 70 could pay up to three and a half times more for their travel insurance than people in their 60s, prior to further underwriting and premium adjustments by insurers for coverage of pre-existing medical conditions.

PRE-EXISTING MEDICAL CONDITIONS YOU'LL USUALLY PAY EXTRA FOR

- Chronic lung conditions
- Cardiovascular disease
- Reduced immunity
- Cancer (some policies automatically cover skin cancer but not melanoma)
- Anxiety
- Depression
- Heart-related medical conditions.

COMMONLY EXCLUDED PRE-EXISTING CONDITIONS

- Medical conditions for which you're travelling to seek medical treatment or review
- Conditions involving drug or alcohol dependency
- Conditions for which you're awaiting surgery, treatment, investigation or procedures
- Conditions with a terminal prognosis.

Any travel booked or undertaken against the advice of a medical practitioner is also usually excluded.

How you're assessed

Many Australian insurers use a 'black box' risk rating system to assess your condition, such as that provided by insurance technology firm Verisk.

The systems may contain a list of health conditions, each of which is assigned a risk factor. Depending on how high this risk factor is, the insurer can choose to rule out cover, or offer cover for an extra premium.

If you can't get cover for a pre-existing medical condition

If you're denied cover for your pre-existing medical condition, or if you can't afford the extra premium, it may still be possible to take out a travel insurance policy.

You'll need to declare your condition to your insurer. They may then offer you travel insurance cover, but issue a certificate that says you won't be covered for any claim that arises because of your pre-existing medical condition.

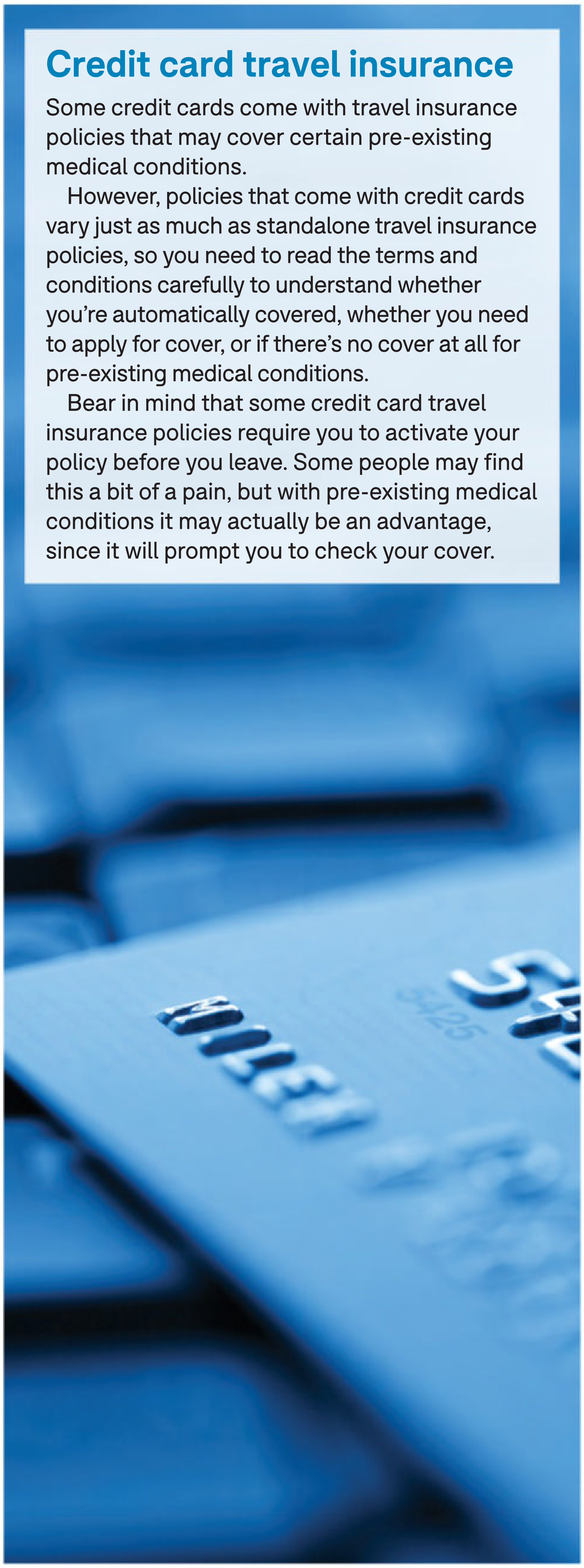
Pregnancy cover

Pregnancy cover will protect you in circumstances such as if you need to cancel your trip due to doctor's advice, or if you're on holiday and incur medical costs that are a result of unexpected complications (something that you weren't already being treated for or had no history of).

Note that travel insurance won't usually cover you for childbirth or for medical costs relating to your newborn if you give birth while on holiday.

Different policies will cover you up to different stages of your pregnancy, so which provider you go with will depend on when you plan to travel (and return home). Not all policies will cover IVF or other medically assisted pregnancies.

CHOICE tip: Check with your airline before you travel – many airlines will only let you fly up to a certain stage in your pregnancy, and may require medical certificates or other documentation.



Credit card travel insurance

Some credit cards come with travel insurance policies that may cover certain pre-existing medical conditions.

However, policies that come with credit cards vary just as much as standalone travel insurance policies, so you need to read the terms and conditions carefully to understand whether you're automatically covered, whether you need to apply for cover, or if there's no cover at all for pre-existing medical conditions.

Bear in mind that some credit card travel insurance policies require you to activate your policy before you leave. Some people may find this a bit of a pain, but with pre-existing medical conditions it may actually be an advantage, since it will prompt you to check your cover.

IMAGES: GETTY

Travel insurance cover for pre-existing medical conditions

	Covered conditions list	Cover available on application	Time period (months)
Fast Cover Basics	✓		24
Fast Cover Comprehensive	✓		24
Fast Cover Standard Saver	✓		24
1Cover Comprehensive	✓	✓	12
1Cover Essentials	✓	✓	12
1Cover Medical Only	✓	✓	12
AHM Comprehensive	✓	✓	12
AHM Medical Only	✓	✓	12
Allianz Basic			na
Allianz Comprehensive		✓	24
Cover-More Travel Insurance Basic	✓	✓	12
Cover-More Travel Insurance Comprehensive	✓	✓	12
Cover-More Travel Insurance Comprehensive Plus	✓	✓	12
Flight Centre YourCover Essentials	✓	✓	12
Flight Centre YourCover Plus	✓	✓	12
Go Insurance Go Basic	✓	✓	3
Go Insurance Go Plus	✓	✓	3
InsureandGo Bare Essentials		✓	12
InsureandGo Gold		✓	12
InsureandGo Silver		✓	12
Medibank Travel Insurance Comprehensive	✓	✓	12
Medibank Travel Insurance Medical Only	✓	✓	12
NIB Comprehensive	✓	✓	6
NIB Essentials	✓		na
Tick Travel Insurance Basic			na
Tick Travel Insurance Budget			na
Tick Travel Insurance Standard		✓	12
Tick Travel Insurance Top		✓	12
Travel Insurance Direct Basics	✓		6
Travel Insurance Direct The Works	✓		6
Worldcare Comprehensive		✓	24
Worldcare Essential			na
World2Cover Basics	✓	✓	12
World2Cover Essentials	✓	✓	12
World2Cover Top	✓	✓	12

TABLE NOTES Covered conditions list The insurer provides a specific list of conditions they will cover. Check the insurer's PDS for details. **Cover available on application** If a condition is not listed as automatically covered then you may be able to apply to the insurer to cover your condition. **Time period** Period of time prior to the booking of the trip during which you must not have had symptoms or treatment for a particular medical condition, in order for it not to be considered a 'pre-existing condition' for travel insurance purposes. If your medical condition is on the insurer's Covered Conditions List, then the time period might be longer than specified above in some cases. **na** Not applicable. ■

JUNE
30
THE
EOFY ISSUE

Tidy savings

You could score big savings (and a clean home) during the EOFY sales, says **Kim Gilmour**

Stick vacuums continue to be in hot demand, and getting a good deal can be challenging if your heart is set on the latest and greatest model on the market. You may get lucky if you're browsing the latest EOFY deals at the right time, but why not save hundreds by opting for a tried and tested model that may be on clearance at this time of year? Quite a few older models we've tested are just shy of being recommended, but still perform their core functions very well – even if they don't have sophisticated technology that can empty your dust bin for you or tell you how much debris you're picking up. For example, Dyson still sells models that were flagship products a few years ago, but are now part of their entry-level line-up, often with hefty discounts on the original sale price. Dyson has also offered EOFY deals during June in the past so expect to see some offers pop up, even on newer products. And floorcare retailer Godfreys features regular stick vac specials from brands such as Miele and Electrolux on its website.

CHOICE tip: Don't forget, if you've got an old stick vacuum lying around that has seen better days, you don't need to dispose of it altogether. Sometimes simply washing or replacing the filter can breathe new life into your old favourite appliance. Depending on the vacuum's original cost it may also be worth buying a new battery if it's not holding a charge as well as it once did.

NEED TO KNOW

- Stick vacuums are becoming more expensive, but it's still possible to grab a good deal.
- Slightly older models can often mean better discounts, but beware of limited ongoing support for spare parts.
- Save even more by avoiding products with features you won't use.

How we test

Our experts Matthew Tung and Adrian Lini conduct a range of tests to assess performance and ease of use.

PERFORMANCE

Hard floor dirt pick-up: We evaluate how well the stick vacuum picks up cornflakes, potting mix and flour.

Quick carpet clean test: We measure dirt pick-up from the carpet after just four passes of the cleaning head, as this is how most people will vacuum.

Thorough carpet clean test: We embed sand evenly into a section of carpet and vacuum it. After 10 passes up and down the carpet the sand is weighed and recorded. This is done twice for each model and the results are averaged to get our score.

Pet hair removal: We embed cat hair into the carpet and vacuum it to a set pattern and speed in the same way as the dirt pick-up test.

> Quite a few older models we've tested still perform their core functions very well

The following performance tests don't contribute to the overall score:

Cleaning corners and edges: Sand is spread into a tight corner and vacuumed to see how close to the corner the cleaner is able to pick up dirt using the standard cleaning head. Most vacs in our test were "OK" to "Good" at this.

Car cleaning: We rate how well each model picks up pebbles and sand from a car, for the models that have a handheld mode available.

Noise test: We measure how loud each model is and comment on its pitch.

EASE OF USE

We assess how easy it is to:

- manoeuvre the vacuum cleaner
- empty and clean the dirt receptacle (for models with auto emptying functions we still base our score on emptying the main vacuum)
- operate the machine's controls
- use and store the supplied main accessories.

IMAGES: GETTY

WHAT TO CONSIDER WHEN BUYING AN OLDER MODEL

How long will spare parts like filters and batteries still be supported? Check the manufacturer's official website to see if they still sell spare parts. Dyson still sells batteries ($119) for its discontinued V6 stick vacuum that we tested back in 2015.

Does it have the accessories I need? Our experts have recently seen more tools supplied with stick vacuums, such as flexible crevice tools, mini motorised brush heads, upholstery tools and mop heads. But the main essentials you need are a crevice tool for corners, a dust brush and an upholstery brush.

Can I clean a car with it? If the model you're considering doesn't convert to handheld mode this could be a deal-breaker.

How's the battery? While all the models we've tested use rechargeable lithium-ion batteries, some are designed to make it easy for you to swap an exhausted battery with a freshly charged one, which is handy for large homes. This feature is especially useful if the running time on max power is less than 10 minutes.

Is the price too good to be true? Regardless of the product's age, make sure you're buying a model intended for the Australian market from a local seller so that you're covered by the applicable safety regulations. ▸

POTENTIAL BARGAIN

84%

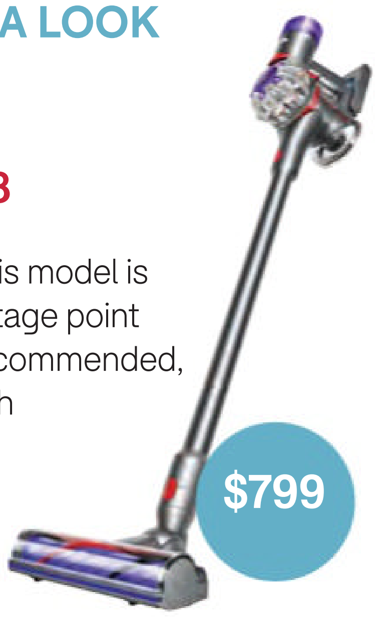
LG A9N-Multi

This recommended model was originally priced at $959 but at the time of writing it had dropped to $799. We can't predict EOFY deals, but you could keep your eyes peeled at major retailers for any further discounts. This vac is excellent at picking up pet hair and very good at cleaning hard floors and thorough carpet cleaning. When converted to handheld mode, it scored 90% for picking up pebbles from a car's floor. It's easy to empty the dust bin into a garbage bag, and the filter is easy to clean. You also get two batteries as standard, and it's easy to swap out one for another, essentially doubling your runtime. It's only OK at cleaning corners and edges, but you can get around this by using the supplied crevice tool.

WORTH A LOOK

79%

Dyson V8



Although this model is one percentage point off being recommended, it's still worth considering if you want a Dyson and are on a budget.

Although the RRP is $799, we've seen variants that come with different accessories (such as the V8 Extra) on sale on Dyson's website for as little as $499 and some retailers may be able to price match this. While it comes with one main hair detangling head, which scores very well for thorough cleaning on carpet, there's no hard floor head provided, so it scores a little lower for this (generally, Dysons that come with a 'fluffy' hard floor head are recommended). Unlike newer Dysons, the battery isn't easily swappable with a fully charged one; it's only designed to be removed once the battery is at the end of its life.

OLDIE BUT A GOODIE

79%

Bosch Athlet BCH6AT25AU/02

With an RRP of $399, at the time of writing this model was on sale on the Bosch website for $199 and is just one percentage point off a recommendation. It's been around for many years and was a top performer back in the day. However, times have moved on, so its design, reminiscent of an upright corded vacuum, is a little dated (for instance it doesn't have a handheld mode, which means you can't use it for your car, and it doesn't come with any cleaning tools). If you aren't bothered about this, it could be worth a look: it scores very well on hard floors and it's very good for thorough carpet cleaning, even rivalling some $1000+ models! It also scores 100% for pet hair removal. On the downside, it's only OK for corners and edges (with no crevice tool to compensate) and you'll only get 10 minutes of use on the max power.

Shop Ethical rating

BRAND	RATING
Beko	C
Bissell	C
Black & Decker	C
Bosch	D
Dirt Devil	C
Dyson	D
Electrolux	C
Kmart	C
LG	C
Miele	B
Roborock	F
Samsung	F
Vax	C
Xiaomi	F

NOTES: Other brands in our review not mentioned here don't have a Shop Ethical rating. For more on Shop Ethical ratings and what they mean, see p73.

			PERFORMANCE								SPECIFICATIONS							
Recommended		Price ($)	CHOICE Expert Rating (%)	Hard floor dirt pick-up score (%)	Ease of use score (%)	Pet hair removal score (%)	Thorough carpet cleaning score (%)	Quick cleaning on carpet score (%)	Car cleaning score (%)	Measured run time (min)	Noise (dBA)	Hard floor head	Swappable battery	Warranty (yr)	Claimed charge time (hr)	Measured dust collector (L)	Weight (kg)	Origin
✓	**Dyson** Gen5detect Absolute	1499	87	90	81	100	89	80	90	12	72	✓	✓	2	3.5	0.5	3.5	Malaysia
✓	**Dyson** V15*	1499	86	83	82	100	91	81	90	12	69	✓	✓	2	4.5	0.5	3.1	Malaysia
✓	**Dyson** V12 Detect Slim Absolute	1349	85	90	81	90	88	79	90	6	73	✓	✓	2	3.5	0.2	2.4	Malaysia
✓	**LG** A9N-Multi	799	84	83	82	100	81	75	90	7	74	✓	✓	2	4	0.4	2.6	Vietnam
✓	**LG** A9T-Auto	1399	84	83	83	100	80	75	90	8	73	✓	✓	2	4	0.4	2.7	Korea
✓	**LG** A9T-Ultra	1499	84	83	83	100	80	75	90	8	73	✓	✓	2	4	0.4	2.7	Korea
✓	**Roborock** H7	899	84	77	85	100	86	79	90	10	70			1	2.5	0.4	2.5	China
✓	**Samsung** Bespoke Jet VS20A95943B_SA	1299	84	90	81	90	78	76	90	9	73	✓	✓	2	3.5	0.4	2.8	Vietnam
✓	**Dyson** Outsize Total Clean	1399	82	83	78	100	80	71	60	12	73	✓	✓	2	4.5	1.6	3.6	Malaysia
✓	**Shark** Cordless Apex Pro X2 Pet Vacuum IZ320	899	82	90	82	90	68	64	90	9	76		✓	2	4	1	4.0	China
✓	**Dyson** Cyclone V10 Animal	899	81	73	81	100	85	74	90	8	78			2	3.5	0.5	2.6	Malaysia
✓	**Tineco** Pure One S12 Platinum 165-1873-2301	1099	81	83	78	100	77	68	90	8	69	✓	✓	2	4	0.5	2.9	China
✓	**Xiaomi** Vacuum Cleaner G11 MJWXCQ05XYHW	515	81	87	82	90	71	67	90	10	73		✓	1	3	0.3	3.0	China
✓	**LG** A9K-Core	1099	80	83	79	100	71	63	90	8	71	✓	✓	2	3.5	0.4	2.7	Korea
✓	**LG** CordZero A9K-Ultra	1299	80	83	79	100	71	65	90	7	73	✓	✓	2	3.5	0.4	2.7	Korea
	Bosch Athlet BCH6AT25AU/02	399	79	80	67	100	82	75	na	10	73			2	6	0.4	3.3	China
	Bosch Zoo'o ProAnimal BCH6ZOOAU/02	529	79	80	72	100	77	69	90	11	73			2	6	0.4	3.3	China
	Dyson V8	799	79	70	82	90	81	76	80	8	72			2	5	0.3	2.5	Malaysia
	Wertheim Evolution	799	79	77	81	100	70	65	80	7	76		✓	2	4–5	0.5	2.8	China
	Dyson V11	1199	78	63	81	100	86	76	90	13	74		✓	2	3.5	0.5	3.0	Malaysia
	Samsung Jet 70 Pet	499	78	73	80	100	71	65	80	6	71		✓	2	3.5	0.6	2.6	Vietnam
	Beko PowerClean Pro 2-in-1 VRT 94129 VI	729	77	80	82	90	60	56	90	14	69	✓	✓	1	4–5	0.5	3.3	China
	Bosch Unlimited Series 6	429	77	77	84	90	64	57	90	10	70		✓	2	4–5	0.3	2.4	Germany
	Dreame Cordless Vacuum T30 VTT1	899	77	73	82	90	74	67	80	11	74		✓	1	4	0.4	2.7	China
	Miele Triflex HX2 Cat and Dog SOML0 HS19	899	77	63	83	90	84	74	90	12	67		✓	2	4	0.3	3.7	Germany
	Beko PowerClean	599	76	63	83	90	79	72	90	10	71	✓	✓	1	4–5	0.6	2.9	China
	Miele Triflex HX2 Pro SOML0	1199	76	63	83	90	80	68	90	12	69	✓	✓	2	4	0.3	3.7	Germany
	Ryobi 18V One+ HP Brushless R18XSV914	459	76	77	78	100	62	53	90	17	74		✓	4 (A)	2	0.6	3.7	China
	Sauber Technic Stick Vacuum	399	76	83	79	90	57	53	80	11	76	✓	✓	2	ns	0.3	2.2	China
	Shark Cordless Vacuum with Self Cleaning Brushroll	549	76	80	80	90	63	57	70	12	73		✓	3	3	0.9	3.4	China

TABLE NOTES Recommended We recommend stick vacs with a CHOICE Expert Rating of at least 80%, as long as they also score at least 70% for hard floor dirt pick-up. **Price** RRP or typical retail price as of April 2023. **CHOICE Expert Rating** consists of hard floor dirt pick-up (30%), ease of use (30%), pet hair removal (15%), quick carpet clean (15%) and thorough carpet clean (10%). **Swappable battery** means the battery is easily removable without tools and can be swapped for a fully charged one (if supplied or bought as optional extra). *Originally tested as V15 Detect Total Clean; now sold as V15 Detect Absolute for $1199 without the mini soft dusting brush and stubborn dirt brush. **(A)** 6 years if registered, 3 years for battery and charger. **na** Not applicable. **ns** Not stated. ■

IMAGE: GETTY

Chill-seeker

A standalone freezer can help you save on groceries by buying in bulk, but there are a few things to consider, says **Ashley Iredale**

Bagged a bargain box of bulk bovine at the butcher, or bingeing through the Ben & Jerry's back catalogue? Then you might be in need of a standalone freezer.

Dedicated freezers use way more energy than a fridge because they're much colder, but the money you save buying in bulk can make up for the extra costs in the long run. And a freezer should last a long time, so it's a worthwhile investment.

Chest vs upright freezers

Chest freezers are great, until you need something from the very bottom. And uprights are great unless you're looking for the most affordable option. Here are some factors to consider when deciding between the two.

Upright freezers

A vertical freezer that opens like a fridge, uprights take up less floor space and in-built drawers make them easier to keep organised. They're usually frost-free, too, so there's less maintenance.

Pros:

- Easier to load and unload.
- Easier to organise and access food.
- Mostly frost-free.
- Smaller footprint.

Cons:

- Less temperature stability.
- Important to fully close the door.
- More expensive to buy and to run.

TIP FOR UPRIGHTS

A child safety lock keeps kids from opening the freezer unnecessarily, and will help prevent food spoilage from accidentally leaving the door open.

NEED TO KNOW

- When it comes to big freezers, keeping them organised is key.
- In the event of an extended blackout, food can spoil, so it's important to know how to determine whether your food's still safe to eat.

Chest freezers

A wide, low freezer with a lid on top, chest freezers tend to fare better temperature-wise because cold air sinks, so it won't 'fall out' when you open them. They are cheaper to run and, because they're not frost free, they have slightly better temperature stability, but you have to manually defrost them every year.

But chest freezers don't have dividers, so you'll need a way to keep your food organised and accessible, particularly with larger models, otherwise it can be difficult to access, or even remember, the contents.

Pros:

- Better performance, especially for temperature stability and evenness.
- Cheaper to buy and run.
- Reach operating temperature faster.

Cons:

- May be challenging if you're short or unsteady on your feet.
- Harder to keep organised.
- Manual defrost is required.
- Large footprint.

TIPS FOR CHEST FREEZERS

Provided you don't need to open it too frequently, you can use the lid of your chest freezer as a work surface. You can even drape a tablecloth or covering over it (just don't cover the vents).

Larger chest freezers come with a risk of falling when reaching for things at the bottom. If this is a concern, opt for an upright instead.

To run your freezer as efficiently as possible, set the temperature to -18°C

ORGANISING YOUR CONTENTS

Upright freezers have handy bins or shelves to keep your food organised, but chest freezers do not. You can throw everything in haphazardly, but that pork shoulder at the very bottom may never see the light of day again. Using a system to keep your freezer organised will make it much easier to live with.

Most chests come with some wire baskets, and you can also buy additional baskets, or use tubs or crates to keep everything organised so you can easily move a tub to see what's underneath, and rotate new additions to the bottom. Measure your internal dimensions to work out the most space-efficient sizes. As well as labelling everything in the freezer, it's also a good idea to keep a list of the contents (you can even write on the freezer itself with a dry-erase marker) so you know exactly what's inside without having to search.

You can use the lid of your chest freezer as a work surface

DEFROSTING A CHEST FREEZER

If you have a chest freezer, you'll need to defrost it once a year. Aim to do this during the winter to help your food stay frozen while you work, try to run down your supplies in the lead-up, and plan where you are going to store your frozen food while the freezer is defrosting before you start.

Don't use anything sharp to scrape off ice, and be cautious about using heat guns or hair dryers that could damage the freezer's plastic liner. A fan can safely speed things up though.

You'll also need a plan for meltwater. You can attach a hose to your freezer's drain or suck the water out with a wet/dry vac.

Next, dry the interior with a towel, inspect the door seal (replace if damaged), then turn the freezer back on – our cool-down score gives you an idea of how quickly your freezer will return to operating temperature.

The energy-efficient freezer

To run your freezer as efficiently as possible, set the temperature to -18°C. Any warmer and your food won't last as long, but any colder and the freezer will use more energy for no benefit.

How do you measure the temperature? Fridge thermometers are cheap and effective, but bear in mind you'll need to open the door to check it. Alternatively you could splurge on a wireless temperature monitor, which includes additional features like temperature alarms to warn you if there's a problem, but if it connects to your home Wi-Fi you might not be able to rely on it in a blackout.

A FULL FREEZER IS A HAPPY FREEZER

A full freezer is more efficient because thermal mass helps maintain stable temperatures so the compressor doesn't cycle as often. You can fill empty space with water bottles. You can these use these to help keep your fridge cool if there's a blackout.

LOCATION

Most people keep their freezer in a laundry or garage, but being outside your home's insulation and air conditioning, these areas tend to have greater temperature fluctuations, so your freezer has to work harder, especially if it's in full sun.

If possible, place your freezer somewhere cool and shady like a basement to help keep your running costs down.

If a sunny spot's your only option, then look for ways to add shade – an awning or shade sail will help reduce running costs. Just don't block the vents or the heat exchanger in the process. ▶

IMAGE: GETTY

Planning for a blackout

If your home is prone to blackouts, look for a freezer with a good warm-up score – that means it's well-insulated and will stay cool for longer if the power goes out.

If you are away when there's a blackout, you may have no way of knowing how long the power was off and, more importantly, whether the food in your freezer was thawed for long enough to spoil. A fully stocked freezer can hold several hundred dollars' worth of food, so you really don't want to bin it if you don't have to.

Here are some surprisingly low-tech ways to find out if your food's still good:

1. **Coin:** Freeze a cup of water and put a coin on top. If the coin has moved to the bottom you know the ice melted and refroze.
2. **Bottle:** Lay a half-full plastic bottle on its side in the freezer, then stand it up once it's frozen. If the ice has levelled itself when you check it, you know it's melted and refrozen.
3. **Bag:** Pop an ice cube in a zip-lock bag and tape it to the inside of your freezer. If the ice is no longer cube-shaped, you know your freezer thawed out.

Use these methods throughout the freezer to find out if food at the centre remained frozen, but thawed at the extremities.

WHAT IF YOUR FREEZER HAS THAWED OUT?

If your freezer has been switched off for an unknown duration then you can't trust that the food is safe to eat. However, your contents insurance may cover you for spoilage from 'insurable events', so it's worth checking your policy in case disaster strikes.

Shop Ethical rating

BRAND	RATING
Beko	C
Bosch	D
Fisher & Paykel	F
Haier	F
Samsung	F
Westinghouse	C

NOTES Other brands in our review not mentioned here don't have a Shop Ethical rating. For more on Shop Ethical ratings and what they mean, see p73.

BEST UPRIGHT

76%

Bosch GSN33VI3A

252L
10-year running cost: $885

BEST CHEST

75%

Haier HCF101

101L
10-year running cost: $555

BEST FOR BIG FAMILIES

74%

Westinghouse WCM3000WE

300L
10-year running cost: $825

IMAGE: GETTY

		COSTS		PERFORMANCE											SPECIFICATIONS					
Recommended		Price ($)	10-year running cost ($)	CHOICE Expert Rating (%)	Temperature performance score (%)	Warm-up score (%)	Cool-down score (%)	Response to changes in outside temperature (%)	Temperature stability score (%)	Temperature evenness score (%)	Temperature range score (%)	Heat load score (%)	Recommended setting score (%)	Claimed energy use	Control location	Rollers	Dimensions (cm, H x W x D)	Claimed volume (L)	Door hinge position	Origin
UPRIGHT																				
✓	**Bosch** GSN33VI3A	1999	885	76	84	82	35	90	82	80	nt	70	80	295	Inside top	✓	176 x 60 x 65	252	L	Poland
✓	**Haier** HVF260WH3-LH	1499	879	75	82	75	53	86	82	80	nt	70	80	293	Front	✓	167 x 60 x 69	255	L	China
✓	**Westinghouse** WFM1700WE	1249	684	75	83	68	60	85	82	90	nt	70	80	228	Inside top	✓	144 x 55 x 56	155	L	China
	Liebherr SGNEF3036	4133	930	73	77	76	53	66	90	90	80	nt	40	310	Inside top	✓	186 x 60 x 63	304	L	Germany
	Samsung SFP345RW	1899	1068	72	82	62	51	90	75	85	nt	75	70	356	Inside top	✓	186 x 60 x 70	323	L	Vietnam
	Beko BVF290W	1349	1080	70	77	69	47	82	75	70	nt	75	80	360	Inside top	✓	172 x 60 x 66	290	L	Turkey
	Fisher & Paykel RF388RXFD2	2899	1224	64	75	50	54	90	59	75	nt	75	55	408	Bottom rear	✓	170 x 64 x 70	363	L	Thailand
CHEST																				
✓	**Haier** HCF101	439	555	75	89	46	85	89	90	90	90	nt	70	185*	Bottom front	✓	85 x 57 x 55	101	B	China
	Haier HCF143	479	660	74	87	48	81	86	90	85	90	nt	80	220	Bottom front right		85 x 72 x 55	143	B	China
	Haier HCF201	589	747	74	85	45	93	84	90	90	nt	75	70	249	Bottom front right		85 x 94 x 55	201	B	China
	Westinghouse WCM2000WD	649	837	74	85	48	86	82	90	90	90	nt	55	279	Bottom front	✓	83 x 98 x 56	200	B	China
	Westinghouse WCM3000WE	819	825	74	86	46	90	89	86	90	nt	75	70	275	Bottom front right		85 x 112 x 63	300	B	China
	Husky HUS-198CHE.1	699	765	72	84	41	89	81	86	90	nt	75	90	255	Bottom front right	✓	85 x 82 x 55	198	B	China
	Westinghouse WCM1400WE	479	543	72	83	41	94	88	86	90	nt	65	40	181*	Bottom front right		86 x 63 x 60	145	B	China

TABLE NOTES Recommended We recommend models with a CHOICE Expert Rating of at least 75%, and at least 70% for temperature performance. **Price** RRP as of April 2023. **10-year running costs** are calculated at a rate of 30c per kWh. A 10-year period gives a useful indication of the long-term differences between high and low energy use – and you should be able to expect your freezer to last at least this long. **CHOICE Expert Rating** consists of temperature performance (55%), warm up (30%), and cooling down (15%). **Temperature performance** is calculated from response to changes in outside temperature (40%), temperature stability (30%), temperature evenness (15%) and heat load (10%) for freezers registered to the latest Australian Standard, or range (10%) for freezers registered to the previous Australian Standard, and recommended or mid setting (5%). **Dimensions** are claimed and rounded up to the nearest centimetre. They do not include the recommended installation space required to keep the unit working optimally, or for opening the door/lid. **Claimed volume** is how much air space the freezer has to cool; for chest freezers most of this space is available for storage; uprights tend to have more inaccessible areas, and some of the volume is lost around the drawers, so usable space is less than the claimed volume. **Door hinge position L** Left-hand side. **B** Back/rear. * Freezer failed its energy test. **nt** Not tested. ■

Show stoppers

Choosing the right cooking function can help you get the best performance out of your oven. **Rebecca Ciaramidaro** explains the different oven symbols and settings

Often the centrepiece of a kitchen, an oven is a costly appliance and one that gets a real workout, so it's important to do your research before buying. Freestanding ovens usually have an integrated cooktop, making them two appliances in one, which gives you even more to consider when choosing. Our tests measure performance of the oven and the cooktop separately. It's important to check the separate performance scores in our table as well as the CHOICE Expert Rating (overall score).

Oven functions explained

Ovens come with an array of features and settings that are often marked with symbols that can be confusing at first glance. Some of these functions are essential, while others are just nice to have. Settings such as fan-forced mode are common across almost all models and tend to get the most use, but knowing how the other settings work and what they should be used for will go a long way towards getting the most out of your oven.

CONVENTIONAL

This setting uses heat from the top and bottom elements, with no fan. It provides reasonably even heating, but tends to be slightly hotter towards the top so food can brown on top. It's ideal for baking single trays of biscuits, scones or slices and egg dishes like quiche.

FAN-FORCED

This setting uses a fan to distribute heat, which comes from the element surrounding the fan. The oven generally heats up more quickly, evenly and efficiently with this function. It's good for pastries and roasts, multi-shelf cooking and reheating.

FAN ASSIST

The gentler cousin of fan-forced, fan assist is ideal for foods that require a short cooking time and use only one or two shelves. A fan circulates heat from the top and bottom elements, which results in a slightly faster cooking time.

PIZZA MODE

This is a good setting for browning the base of foods like pizzas, pies, focaccia and bread. It uses high heat and a combination of 'base heat' and fan or fan-forced, where heat comes from the elements surrounding the fan and from the bottom element. The pastry bake function is similar to pizza mode, using the fan and bottom element.

How we test

We test performance and ease of use on both the cooktop and the oven.

Cooktops

Low heat setting We melt chocolate and cook white sauce. Induction cooktops automatically receive 100% for melting chocolate.
Turndown ability and control responsiveness We cook rice using the absorption method.
High heat setting We cook a vegetable and beef stir fry.
Ease of use We check the position, labelling and size of the controls, and how easy they are to operate. We also consider the size and layout of the hotplates; ease of cleaning; and stability of any trivets.

Ovens

Roasting We roast a chicken to assess how well the oven can cook a non-uniform food at a moderate to high temperature over a long period, while retaining moisture and crisping the skin.
Multi-shelf cooking We bake scones over two shelves to test how evenly the ovens cook at a high temperature for a short time.
Low-temperature cooking We bake meringues to assess cooking ability at a low temperature for a long period.
Base cooking We cook a freshly prepared pizza at a very high temperature to assess the oven's ability to crisp and brown the base of the pizza, and evenly cook the toppings.
Grilling We toast bread to assess how quickly the grill toasts and how evenly the heat is distributed.
Ease of use We assess the ease of use of the grill and oven, as well as the oven's controls and labels, and the ease of cleaning its inside and outside surfaces.

FAN GRILL

This function alternates between both the grill element and the fan; the fan disperses the heat while the grill roasts from above. It's ideal for cooking large cuts of meat like roasts, or meats that require longer cooking times like chicken legs and sausages. It's also great for baked vegetables and for crisping and browning the top of pasta and potato bakes.

BOTTOM HEAT ONLY

This is an alternative to pizza mode where heat comes from the bottom element only. It's ideal for foods that require a crispy base, like pizza, where you don't want the top to burn. When using this feature you'll get the best results if you place your food in the lower half of the oven and use aluminium trays for even browning.

GRILL ONLY

Using heat from the grill element is ideal for smaller, tender cuts of meat (as you run the risk of burning larger cuts without them being cooked through) as well as toasties and melts. Unless stated in the instructions, you should grill with the oven door closed and use one of the top two shelf positions. In some models the grill area will be separate to the main oven cavity. ▶

IMAGES: GETTY

TOP PERFORMER

$3999

82%

Westinghouse WFE946SD

With excellent cooktop performance and very good oven performance, this Australian-made model is our top performer. The cooktop is very well laid out, with a generous extendable zone to accommodate larger cookware. There's no edge around the cooktop surface so it's easy to clean and the touch controls are clearly labelled. But the graded, manual temperature controls may not be as accurate as digital controls, and the touch controls can also become unresponsive when the surface is greasy. The oven has telescopic runners and the grill shelf has stoppers that prevent the shelf from being pulled right out. This model comes with an air fryer basket, but be aware that it may be difficult to clean and the oven itself will require cleaning after using the air frying mode. The oven also has no self-cleaning function.

BEST FOR SMALL SPACES

$3299

80%

Bosch HKS79R250A

If you don't have much space, this fully electric option with ceramic cooktop is the only 60cm model that we recommend. The oven performance was rated as excellent and the cooktop performance is very good, plus the model is a good all rounder for ease of use. The cooktop layout is very good with both an extendable zone and a dual zone, but it may not work well when using cookware with a diameter larger than 21cm. The controls are retractable, making them easy to clean; however, it's not initially obvious which control operates which cooking zone. The function symbols for the oven are small and you may need to refer to the instructions initially to understand them. The oven shelves and baking trays have a smooth coating which makes them easier to clean and there's a useful shelf number guide inside the door cavity. There are no telescopic runners, and the shelves can tilt under a heavy load.

DUAL ENTERTAINER

$3899

80%

Bosch HSB738357A

You'll get excellent results from both the cooktop and oven components of this stainless steel, dual-fuel, freestanding oven. Visibility through the door is also excellent, making it easy to view food on the oven's top shelf. Telescopic runners make for convenient loading and unloading, and there's good coverage of the catalytic liners for cleaning. That said, the gas cooktop only scores OK for ease of use – the large cast-iron trivets are heavy and bulky, and while the layout of the burners is very good, you can only comfortably fit five pots on the six burner cooktop. It's also worth noting the burner surrounds are aluminium, so they stain easily, and the cooktop controls are at the front of the appliance, making them accessible to children.

Shop Ethical rating

BRAND	RATING
Beko	C
Bosch	D
DeLonghi	D
Fisher & Paykel	F
Haier	F
Westinghouse	C

NOTES: Other brands in our review not mentioned here don't have a Shop Ethical rating. For more on Shop Ethical ratings and what they mean, see p73.

		TYPE			COSTS			PERFORMANCE						SPECIFICATIONS										
Recommended		Oven type	Cooktop type	Size (cm)	Price ($)	Oven running costs/10 years ($)	Cooktop running costs/10 years ($)	CHOICE Expert Rating (%)	Oven performance score (%)	Oven ease of use score (%)	Cooktop performance score (%)	Cooktop ease of use score (%)	Grilling score (%)	Self-cleaning function	Telescopic runners	Half grill	Pizza mode	Number of oven shelves	Number of cooking zones	Cooktop material	Measured internal oven dimensions (mm, H x W x D)	Measured internal oven volume (L)	Origin	Warranty
✓	**Westinghouse** WFE946SD	E	C	90	3999	449	490	82	89	63	95	82	70		✓	✓	✓	2	5	C	315 x 778 x 425	104	Australia	2
✓	**Falcon** Classic Deluxe CDL90DF + Colour (A)	D	G	90	11,995	441	nt	81	93	69	93	67	90	CL	(B)	✓		6	5	E	310 x 460 x 360	51	England	3
✓	**Fisher & Paykel** OR90SCI4W1	E	I	90	7799	692	500	81	90	64	95	75	90		✓		✓	3	5	C	315 x 760 x 420	101	Thailand	2
✓	**Bosch** HKS79R250A	E	C	60	3299	352	490	80	93	71	85	70	100	P			✓	2	4	C	298 x 472 x 420	59	Turkey	2
✓	**Bosch** HSB738357A	D	G	90	3899	476	nt	80	91	71	91	65	90	CL	✓		✓	2	6	S	340 x 720 x 420	103	Italy	2
✓	**Fisher & Paykel** OR90SCG6X1	D	G	90	8099	805	nt	80	89	69	90	72	75	P	✓		✓	4	5	S	310 x 780 x 440	106	Thailand	2
	Westinghouse WLE543WC	E	C	54	1749	345	410	79	85	64	98	67	70					2	4	C	293 x 475 x 420	58	Australia	2
	Belling BMR60DOINDW	E	I	60	2999	266	510	78	85	61	89	75	90	CL	✓	✓	✓	3	4	C	365 x 455 x 410	68	ns	5
	Beko BFC60GMX	D	G	60	1849	352	nt	76	86	63	88	68	80	CL	✓		✓	2	4	S	320 x 480 x 420	65	Turkey	2*
	Beko BFC60VMX1	E	C	60	1849	285	nt	76	87	63	84	70	80	CL	✓		✓	2	4	C	320 x 480 x 420	65	Turkey	2*
	Bosch HXU09AH50A	D	G	60	1499	361	nt	76	84	59	94	67	75	CL			✓	2	4	E	300 x 490 x 420	62	ns	2
	Fisher & Paykel OR90SCG1X1	D	G	90	3199	687	nt	75	81	56	90	72	45					2	5	S	310 x 775 x 420	101	Italy	2
	Euromaid CW60	E	C	60	2799	396	nt	73	81	69	73	67	75	CL				2	4	C	310 x 480 x 420	62	Turkey	2
	Smeg CS6GMXA	D	G	60	3590	359	nt	73	84	58	88	63	90	S	✓	✓	✓	1	4	S	320 x 470 x 420	63	Italy	2
	Smeg FS9010CER-1	E	C	90	5290	485	460	73	90	54	86	63	100	S			✓	1	5	C	337 x 720 x 418	101	Italy	2
	DeLonghi DEFL605E	E	C	60	1899	383	nt	72	67	64	84	73	45					1	4	C	280 x 455 x 420	54	Italy	2
	Euromaid FC9PS	E	C	90	2799	463	470	72	79	63	79	67	40	CL	✓		✓	2	5	C	280 x 700 x 430	84	China	2
	Haier HOR54B7MSW1	E	C	54	1499	378	nt	72	83	63	78	63	75	S				2	4	C	300 x 440 x 390	51	China	2
	Belling BFS60SCCER	E	C	60	2499	330	390	71	73	64	81	65	40	CL				2	4	C	320 x 470 x 412	62	Turkey	3

TABLE NOTES Recommended We recommend freestanding ovens with a CHOICE Expert Rating of at least 80%. **Type E** Electric, **D** Dual fuel. **Cooktop type C** Ceramic, **G** Gas, **I** Induction. **Price** Recommended retail price as of April 2023. **Oven running costs** Based on using the oven at 170°C for one hour, three times a week, for 10 years, at 30c per kWh. **Cooktop running costs** Based on using the cooktop for 30 minutes, three times a week, for 10 years, at 30c per kWh. **CHOICE Expert Rating** is made up of oven performance (25%), cooktop performance (25%), oven ease of use (25%) and cooktop ease of use (25%). **Self-cleaning function CL** Catalytic liners, **P** Pyrolytic, **S** Steam clean. **Cooktop material C** Ceramic, **E** Enamel, **S** Stainless steel. **(A)** Dimensions and volume are for main oven. **(B)** Grill only. Tall oven dimensions are 520 x 290 x 370 and measured internal oven volume is 56L. *Extendable to 5 years if registered within 90 days of purchase. **nt** Not tested. **ns** Not stated. All models are fan-forced except the DeLonghi DEFL605E. All models have grill only (no fan) function. All models have fan grill except the Westinghouse WLE543WC and Beko BFC60GMX. The Bosch HXU09AH50A, Belling BFS60SCCER and Fisher & Paykel OR90SCI4W1 and OR90SCG6X1 have a drop-down grill element for cleaning. Only the Bosch HKS79R250A has a smokeless grill tray. ■

IMAGES: GETTY

Dried and tested

For many households a clothes dryer is a necessary convenience, but a strain on the environment and energy bills. That may soon change, says **Ashley Iredale**

Australians are blessed with an abundance of sunlight, but it's not always available when you need it. If you're trying to finish the laundry late at night or during a downpour, or you just don't have all day to wait, then a clothes dryer will be a sanity saver – as it has been since the earliest days of electric dryers.

Over the years, clothes dryers have become more sophisticated, with more programs and settings, condenser technology that captures moisture in a tank rather than venting it into your laundry, and even connected 'smart' features so you can monitor your dryer's progress remotely.

Dryers of the future

Unfortunately, our crystal ball is in the wash, but you don't need powers of divination to see into the future for clothes dryers – it's almost certainly going to be greater convenience and usability, better drying performance, and more attention to environmental factors, particularly energy efficiency.

In the old days, a dryer's only options were warm or hot, and they operated by timer, running for a set time regardless of the residual moisture in your clothes, so it was easy to over-dry your laundry. The Australian Standard specifies a dryer must be able to dry a full capacity load to a moisture content of 6% or lower.

NEED TO KNOW

- Advances in technology and regulations mean more energy-efficient dryers will become increasingly common, and readily available for the cost-conscious consumer.
- Those of us who grew up with old-school dryers might need to get used to clothes feeling slightly damp at the end of a cycle.

To many of us, 6% moisture still feels pretty damp, but that's because we've grown up with dryers that happily dry clothes to a much lower moisture content than that, which is bad because it uses more energy than necessary, sets creases so ironing's harder, and can damage your clothes.

Modern dryers offer a much greater choice of programs, with options for different types of clothing and different applications, and we can expect to see even more specific options in the future. And thanks to connected appliances, we'll also have the ability to update existing programs via the internet, or download additional programs for specialist drying applications.

AUTO-SENSING

Another great feature of the modern dryer is auto-sensing, which means your dryer can switch itself off automatically once your laundry reaches the desired level of dryness, saving you up to 15% on running costs over a non-sensor timer dryer. There are two ways auto sensing can measure the moisture level of your clothes.

The first is by measuring the exhaust air temperature – a sudden increase indicates there's little or no moisture remaining in your clothes.

The second method is electrical conduction whereby the dryer passes a small amount of electricity through your clothes between two points – the drier your clothes, the less conductive they are, and the weaker the current. When the current drops to a certain point, the dryer knows precisely how dry your clothes are and can switch itself off. These sensors can be a bit hit and miss – we occasionally find dryers in our tests that don't achieve that 6% moisture threshold, but accuracy and consistency should improve as new technologies emerge.

In the lab we can also measure this 6% or better moisture content for non-sensor timer dryers by running the entire test on a floor scale and watching how the combined weight of clothes and dryer changes. This isn't exactly practical outside of the lab, which is why we no longer test vented timer dryers this way. We now use a set time of drying regardless of moisture content, because that's how most people use their own dryers at home.

ENERGY EFFICIENCY

Manufacturers are already making great advances in energy efficiency through heat pump technology. Pumping existing heat energy from the outside into your clothes, rather than creating new heat energy, uses only around a third of the energy of an equivalent vented dryer. It's why dryers with nine and ten energy star ratings are increasingly common (as opposed to one or two stars for a conventional vented dryer).

> **Manufacturers sometimes take shortcuts in the quest for energy efficiency – some don't offer reverse tumbling, for instance**

There's a downside to the technology though – upfront cost. If you only use your dryer sparingly, a heat pump model may not make financial sense as you may never recoup the purchase price in lower running costs.

Manufacturers sometimes take shortcuts in the quest for energy efficiency – some don't offer reverse tumbling for instance, as it's more efficient to run heat pump, fan and drum off the one motor. They get a good star rating, but bedsheets and towels tend to wad up into a laundry sausage and not dry.

We believe these issues will be resolved over time as the technology improves. We're already seeing the price of heat pump dryers coming down, which, combined with tighter environmental regulations, will drive adoption of high-efficiency dryers. (Switzerland has already banned the sale of inefficient vented dryers, and similar regulations may eventually come into place here, just like for fridges under the MEPS scheme.) ▶

IMAGE: GETTY

SMART FEATURES

Another emerging dryer technology is 'smart' appliances that connect to your Wi-Fi so you can monitor and control them remotely. We see this as something of a gimmick for now – at the end of the day you still have to put the clothes in and take them out yourself. But the technology does hold great potential as part of the Internet of Things: if your dryer could talk to your energy system and turn itself on when your solar panels are generating surplus energy, or overnight to take advantage of low off-peak tariffs, for example, it could greatly reduce your energy bills. And while we don't recommend running your dryer when you're not at home due to the risk of fire, it's not too much of a stretch to picture a connected dryer calling 000 if it does catch fire.

SUSTAINABILITY

Both push and pull factors are driving manufacturers to make their dryers more environmentally sustainable.

Australian consumers are becoming increasingly aware of our environmental footprint, and turning away from high-polluting, non-recyclable appliances.

Product stewardship laws in some European countries already require manufacturers to take back and recycle their products at end of life – a double incentive to use certain manufacturing techniques (for example, snap fasteners instead of glue) and recycled and recyclable materials (for example, stainless steel instead of plastic) that mean dryers last longer and are easy to break down at end of life.

One thing we do know is that in the modern world, the clothes dryer isn't disappearing any time soon. So the introduction of new technologies and advances in existing technologies will only make things better – for your clothes, for you as a consumer, and for the planet.

BEST HEAT PUMP DRYERS

$1699

87%

LG DVH5-08W

$1649

87%

Samsung DV80T5420AB

BEST VENTED DRYER

$849

76%

Electrolux EDV705H3WB

Shop Ethical rating

BRAND	RATING
Asko	F
Beko	C
Bosch	D
Electrolux	C
Fisher & Paykel	F
Haier	F
LG	C
Miele	B
Samsung	F
Westinghouse	C

NOTES: For more on Shop Ethical ratings and what they mean, see p73.

			COSTS		PERFORMANCE							SPECIFICATIONS										
Recommended		Type	Price ($)	Running cost over 10 years ($)	CHOICE Expert Rating (%)	Drying time score (%)	Energy efficiency score (%)	Cycle time (min)	Noise (dBA)	Brand reliability score (%)	Brand satisfaction score (%)	Delay start	Anti-crease	Reverse tumbling	Drying rack	Wall-mountable / stackable	Air exhaust (vent) location	Ducting kit	Can it be plumbed in?	Stacking kit included	Claimed capacity (kg)	Dimensions (cm, H x W x D)
✓	**LG** DVH5-08W	H	1699	433	87	80	91	110	46	88	84	✓	✓		✓	– / ✓	na	na	✓	✓	8	85 x 60 x 69
✓	**Samsung** DV80T5420AB	H	1649	414	87	79	92	113	50	na	na		✓	✓		– / ✓	na	na	✓		8	85 x 60 x 65
✓	**LG** DVH9-09W	H	1799	443	86	79	91	112	52	88	84	✓	✓	✓	✓	– / ✓	na	na	✓	✓	9	85 x 60 x 69
	Miele TWF 720 WP	H	2999	432	81	72	91	130	51	84	90	✓	✓	✓	O	– / ✓	na	na	✓		8	85 x 60 x 64
✓	**Fisher & Paykel** DH8060P1	H	1599	718	80	72	85	129	57	87	84	✓	✓	✓	O	– / ✓	na	na	✓		8	85 x 60 x 65
	Fisher & Paykel DH9060FS1	H	2699	441	78	59	91	164	53	87	84	✓	✓	✓	✓	– / –	na	na	✓		9	85 x 60 x 67
	Miele TWH780WP	H	3199	564	78	62	88	155	50	84	90	✓	✓	✓		– / ✓	na	na	✓		9	85 x 60 x 65
	Bosch WTW87564AU	H	2199	752	77	67	84	143	53	79	86	✓	✓		O	– / ✓	na	na	✓		9	85 x 60 x 65
✓	**Electrolux** EDV705H3WB	V	849	1373	76	85	70	97	56	89	84	✓	✓	✓		✓ / –	Front or rear	O	na	na	7	80 x 60 x 60
✓	**Electrolux** EDV605H3WB	V	699	1398	75	83	70	104	54	89	84	✓	✓	✓		✓ / –	Front	O	na		6	80 x 60 x 56
✓	**Westinghouse** WDV556N3WB	V	649	1391	75	83	70	103	54	na	na		✓	✓		✓ / –	Front	O	na		6	80 x 60 x 56
	Asko T608HX.W.AU	H	2999	518	74	64	89	149	55	na	na	✓	✓			– / ✓	na	na	✓	✓	8	85 x 60 x 66
	Bosch WTX88M20AU	H	2399	501	73	61	90	157	51	79	86	✓	✓		O	– / ✓	na	na	✓		8	84 x 60 x 61
	Haier HDV50E1	V	609	1445	72	76	69	119	55	na	na	✓	✓	✓	O	✓ / ✓	Front or rear	O	na	✓	5	83 x 60 x 59
	Asko T208C.W.AU	C	1999	1335	71	82	71	105	55	na	na	✓	✓			– / ✓	Rear		✓	✓	8	85 x 60 x 64
	Asko T408HDWAU	H	2599	518	71	69	89	139	57	na	na	✓	✓			– / ✓	na	na	✓	✓	8	85 x 60 x 66
	Beko BDP710W	H	1249	826	71	54	83	174	57	na	na	✓	✓	✓	O	– / ✓	na	na	✓		7	85 x 60 x 57
	Fisher & Paykel DE6060M2	V	659	1508	70	74	67	126	56	87	84	✓		✓		✓ / ✓	Front or rear	✓	na		6	83 x 60 x 57
	Haier HDV60A1	V	609	1494	69	70	68	135	55	na	na		✓	✓	✓	✓ / ✓	Front or rear	O	na	✓	6	83 x 60 x 59
	Fisher & Paykel DE8060P3	C	1299	1460	68	80	69	109	59	87	84	✓	✓		✓	– / ✓	Front	na	✓		8	85 x 60 x 65
	Haier HDV40A1	V	519	1541	68	70	67	134	54	na	na			✓		✓ / ✓	Front	O	na	✓	4	83 x 60 x 50
	Haier HDC80E1	C	999	1526	67	80	67	110	57	na	na	✓	✓		✓	– / –	Rear		✓		8	85 x 60 x 65
	Haier HDV70E1	V	795	1607	67	70	65	136	56	na	na	✓	✓	✓		✓ / ✓	Front or rear	✓	na	✓	7	83 x 60 x 59
	Fisher & Paykel DE7060G2	V	849	1642	66	69	65	137	56	87	84	✓	✓	✓	✓	✓ / ✓	Front or rear	✓	na		7	83 x 60 x 57

TABLE NOTES Recommended We recommend heat pump dryers with a CHOICE Expert Rating of at least 75%, at least 80% for energy efficiency and at least 70% for drying time; and condenser and vented dryers with a CHOICE Expert Rating of at least 70%, at least 60% for energy efficiency and at least 80% for drying time. If a dryer can't achieve a 6% or better moisture content we won't recommend it. **Type H** Heat pump, **V** Vented, **C** Condenser. **Price** RRP at April 2023. **Running cost** Based on drying a 3.5kg load about three times a week (150 times a year) for 10 years, with electricity at 30c/kWh. **CHOICE Expert Rating** is made up of energy efficiency (60%) and drying time (40%). If a dryer can't dry to at least 6% moisture content (the standard requirement, or cupboard dry) we apply a penalty of 2.5% to its CHOICE Expert Rating. If it cannot get below 8%, the penalty rises to 5%. **Brand reliability scores** are taken from our brand reliability survey 2021, and don't affect the overall score. Scores refer to brands, not models. **Drying rack and ducting kit O** Optional. All models in our test have auto-sensing, and for all models in our test the filter is located on the inside front. **na** Not applicable. ■

IMAGE: GETTY

Pump up the heat

A reverse-cycle air conditioner may be your best home heating option. **Chris Barnes** explains

As temperatures begin to drop, many people will wheel out a portable electric heater or fire up a gas heater, often overlooking the far more efficient and effective heater they may already have: their reverse-cycle air conditioner.

Air conditioners have a reputation for being expensive beasts, both to buy and to run, and it's true that the upfront installation cost of a split-system air conditioner is a lot steeper than a portable electric heater. A split-system will cost anywhere between $600 and $5500, plus installation costs of $600 or more, while a portable electric heater will usually cost just $100 to $300.

However, the air conditioner wins on running costs and its ability to warm a bigger space. Run for 500 hours over winter, a 2.4kW electric heater will typically add over $300 to your electricity bill, while a small 3.5kW reverse-cycle air conditioner will only cost about $115 to run. You can see how the portable heater's costs will add up over time, especially if you're running more than one of them.

> **The air conditioner wins on running costs and its ability to warm a bigger space**

NEED TO KNOW

- Reverse-cycle air conditioners can be expensive to buy and install, but are cheaper to run than portable electric and gas heaters.
- Look for end-of-season or financial year sales to pick up a bargain.
- Make sure the new unit is installed ahead of peak season when you'll need it most.

Why are they cheaper to run?

The reason why an air conditioner is cheaper to run, even when it's actually delivering more heating energy overall than a portable heater, is thanks to heat pump technology. Air conditioners, refrigerators and heat pump hot water systems all use

this technology in similar ways to achieve efficient heating and cooling.

In cooling mode, a reverse-cycle split-system air conditioner extracts heat from the indoor air and pumps it outside, via the refrigerant gas in the pipes connecting the indoor and outdoor units. The outdoor unit releases the heat and sends the cooled refrigerant back to the indoor unit where the cycle continues. Your refrigerator runs on a similar principle, except that the space it's cooling is just the inside of the fridge and freezer; if you've ever wondered why the back of the fridge gets warm, that's where the extracted heat is released.

In heating mode, the process is simply reversed to extract heat energy from the outdoor air and send it indoors. Even in cold weather there's some heat energy in the outdoor air, though this technology does become less effective as the temperature approaches zero degrees or lower. A heat pump hot water system uses this principle as well, but puts the heat into its water tank rather than a room.

By making use of free energy in the air, the air conditioner can deliver much more heat

By making use of free energy in the air, the air conditioner can deliver much more heat per kWh of electricity used than a simple electric heater. The measure of heating efficiency is known as the coefficient of performance (COP) and it's the main factor in calculating an air conditioner's heating star ratings (other factors include energy consumption in standby mode and whether the star rating is for a hot, average or cold climate zone).

Most reverse-cycle air conditioners have a COP of around four or five, meaning they can typically deliver four or five times more heat per kWh of electricity than a portable electric heater. Portable electric heaters use electric resistance to deliver heat, and although all that electricity does turn into heat, it's the only source of energy, so the heater's COP is one, at best. ▶

26
TOO WARM
TOO COOL
FEEL COOL
ECONO COOL
FAN
FAN-DRY
POWERFUL COOL
VANE
MODE
SELECT
TIME

IMAGES: GETTY

What about a gas heater?

A portable unflued gas heater typically costs from $650 to $1400 to buy, but requires a gas bayonet connection, which could easily add a few hundred dollars in installation costs if you don't have one already (assuming that you already have gas connected to the home). A small 1.5kW gas heater will typically cost about $212 to run for 500 hours over winter; less than an electric heater, but more than an air conditioner.

So again, the reverse-cycle air conditioner may be more expensive to buy and install, but is cheaper to run, and that remains true even when comparing larger gas heaters and air conditioners.

While gas heaters are certainly effective, they must be regularly maintained to make sure they aren't releasing pollutants such as carbon monoxide, nitrogen dioxide and fine particulates into your indoor air. Studies show that due to such pollutants, gas heating and cooking appliances can contribute to childhood asthma and other respiratory health problems. And of course gas is a non-renewable resource, and gas prices have risen in recent times and may continue to rise further. Electricity prices have also risen, but are expected to come down over the next several years, and installing your own solar panel system can make electricity very cheap indeed.

These are all factors behind the growing movement to "get off gas"; many people are looking to make their homes all-electric and disconnect from gas altogether.

When is the best time to buy an air conditioner?

Before you really need it! Avoid buying an air conditioner in peak season if you can – that will be summer in most parts of Australia, but could be mid-winter too if you're in a colder region. Installers are usually very busy during these periods and you might have to wait a number of weeks before your new unit can be installed.

Shop around before the peak season starts, so that your new unit is already installed and ready to go when you need it most.

Alternatively, it can be worth buying just after the peak season ends. Old stock is often discounted as retailers make room for new models. As summer is the main period when Australians look to buy an air conditioner, promotions often begin in spring. But end of financial year sales can still line up nicely with a brand or retailer wanting to clear old stock before new models arrive for the warmer months, so it's worth keeping your eye out.

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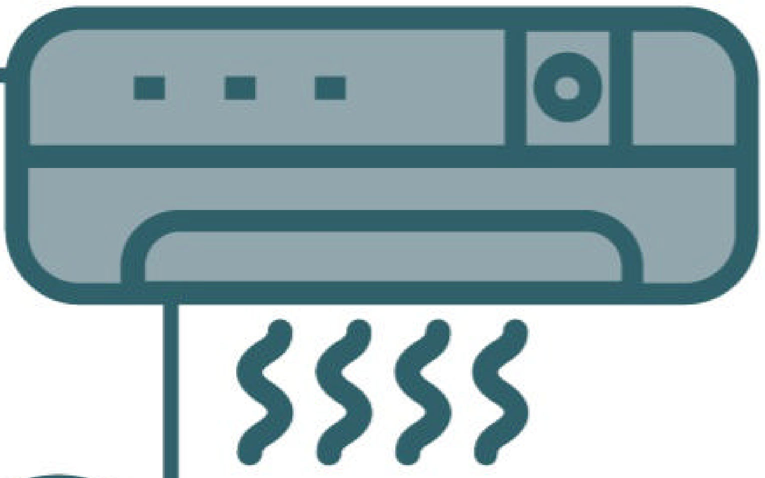
THE EOFY ISSUE



What to buy

We recommend air conditioners with a CHOICE Expert Rating of 80% or more. These models score well for cooling and heating efficiency and most score well for their range of airflow too. A model with a good airflow score has a useful range of fan settings, from a quiet gentle breeze to a powerful blast for rapid cooling or heating. Our table shows the recommended models in each category. There are models representing most cooling and heating capacities included.

How we review air conditioners

We source data on the models directly from manufacturers and cross-check it against the government registration database. We've done this for the past several years as it allows us to review more models, and because lab testing of air conditioners is unfortunately prohibitively expensive.

Shop Ethical rating

BRAND	RATING
Fujitsu	C
Haier	F
LG	C
Mitsubishi Heavy Industries	F

NOTES: Other brands in our review not mentioned here don't have a Shop Ethical rating. For more on Shop Ethical ratings and what they mean, see 73.

RECOMMENDED AIR CONDITIONERS	COSTS		PERFORMANCE									SPECIFICATIONS			
	Price ($)	Yearly running cost ($)	CHOICE Expert Rating (%)	Cooling efficiency score (%)	Heating efficiency score (%)	Airflow score (%)	Brand reliability score (%)	Owner satisfaction score (%)	Noise indoor / outdoor (dBA)	Cooling capacity (kW)	Heating capacity (kW)	Number of fan speeds	Demand response feature (DRED)	Human presence sensor	Wi-Fi control
SMALL – LESS THAN 4KW															
Mitsubishi Heavy Industries SRK20ZSXA-W	1273	306	85	90	90	67	90	94	19–38 / 56	2	2.7	4	✓	✓	
Actron Air WRE-026CS	900	311	84	85	89	70	na	na	24–38 / 52	2.7	2.8	4	✓	✓	(A)
Mitsubishi Heavy Industries SRK25ZSXA-W	1283	326	80	80	85	69	90	94	19–39 / 57	2.5	3.2	4	✓	✓	
MEDIUM – 4KW TO 6KW															
LG WH18SL-18	2655	391	85	90	87	71	79	80	49 / 51	5.1	6.1	5	✓		✓
Fujitsu ASTG18KMTC	2669	402	84	88	90	66	88	88	46 / 47	5.0	6.0	4	✓	✓	(A)
Daikin FTXM50UVMA	1927	407	83	89	87	63	88	91	28–45 / 44–47	5.0	6.0	5		✓	(A)
Haier AS53FEBHRA / 1U53RABFRA	1385	402	81	90	85	55	na	na	33–45 / 55–58	5.1	5.7	5	✓	✓	✓
Haier AS53DDBHRA / 1U53RAAFRA	1664	414	80	88	84	57	na	na	27–46 / 52	5.0	5.7	5		✓	✓
LARGE – OVER 6KW															
LG WH21SL-18	2895	421	82	86	86	67	79	80	49 / 53	6.2	7.1	5	✓		✓
Mitsubishi Heavy Industries DXK21ZRA-W*	1820	437	82	84	90	64	90	94	25–44 / 64	6.3	7.1	4	✓		(A)
Mitsubishi Heavy Industries SRK63ZRA-W*	1820	437	82	84	90	64	90	94	25–44 / 64	6.3	7.1	4	✓		(A)

TABLE NOTES Recommended We recommend air conditioners that earn a CHOICE Expert Rating of 80% or higher. All models in the table are recommended. **Price** Suggested or typical retail price as of March 2023. Actual prices can vary considerably from the suggested retail price. Installation costs not included. **Yearly running cost** We calculate how much each model costs to deliver a set amount of full cooling and heating per year when running at its measured maximum capacity, with the remainder of the year in standby mode (based on electricity costs of 30c/kWh). Your actual running costs will depend on your personal usage. **CHOICE Expert Rating** is made up of cooling efficiency (40%), heating efficiency (40%) and airflow (20%) for reverse-cycle models. A model scoring 90% has excellent efficiency, 70% is good and 50% is borderline. Scores for previously reviewed models can change from their original published values because the increasing efficiency and performance of new models occasionally requires us to rescale our scoring method. **Brand reliability and owner satisfaction scores** From our 2020 survey of more than 1700 people. **Noise** Where possible, we show the quietest indoor rating (the lowest fan speed) and the loudest outdoor noise rating. Manufacturers may measure these differently and some don't give the full noise ranges for their models, meaning the numbers are only broadly comparable. Actual noise levels can vary depending on the installation location. * These two models are technically identical. **(A)** Optional extra. **na** Not available. All models in the table use R32 refrigerant gas; have a fast operation setting ('powerful' or 'jet'); a quiet operation setting; a fan-only mode; sleep mode with auto temperature reduction; and a five year warranty. ■

IMAGES: GETTY

JUNE 30 THE EOFY ISSUE

Getting in the picture

It can be hard to predict when new TVs will hit the stores, but **Denis Gallagher** says keeping an eye on new releases and older models can help you bag an EOFY bargain

The end of financial year (EOFY) sales can provide a more affordable opportunity to update that 10-year-old plasma TV that is eating up half of your electricity bill, or your old LCD TV that isn't quite as smart as you'd like. You may think that EOFY sale products are mostly old stock that has been around for a year or more. But each TV company has a different release schedule and this may impact the EOFY sale price and whether or not you are getting a true bargain.

To get the best deal, check out our guide to bagging a TV bargain (**choice.com.au/TVbargains**) and read on to find out which models from the big brands you're likely to find for cheaper this sales period.

> **Each TV company has a different release schedule and this may impact the EOFY sale price**

Models to look for

The two biggest players in the Australian TV market, **Samsung** and **LG**, both announced that their latest 2023 TV range would be available in April. But our buyers were still having trouble finding some of the models to buy for testing in May. Some retail outlets also advised us that certain models were more likely to be available later in June, meaning that they may arrive just in time for the EOFY sales.

Keep an eye out for the **Samsung QA65LS03BAW**, one of the 'frame' TV models, which is already being offered at a great price. The big push for LG OLED in 2023 is a brighter picture, which has been an issue for some people wanting to watch an OLED display in a brightly lit room. Expect significantly reduced prices for some premium 2022 OLED TVs (G2 and C2 models) and don't assume a larger screen will always be more expensive. For example, we recently spotted a 65-inch LG OLED model marked down so significantly it ended up being $300 cheaper than the 55-inch version.

Hisense is the third-most popular TV brand in Australia, with a range of

NEED TO KNOW

- Don't be afraid to buy last year's TV at the EOFY sales, as many models, particularly from Sony, were released very late in 2022.
- When shopping for a large TV, take care to treat it with respect – shoving your new 75-inch TV in the boot is a recipe for disaster.

65-inch models rolling out in June... maybe. While we haven't tested them yet, the most interesting models to look out for in the EOFY sales include the 65-inch X8HAU and X9HAU OLED TVs that, as of early May, were discounted by $2000 and $1000 respectively, meaning they could be even cheaper by EOFY sale time.

Sony traditionally drip feed their model releases from June all the way up to the end of the year, and 2023 is no different. While they have announced a new, brighter OLED model, don't expect to see any 2023 models in the EOFY sales. Instead, keep an eye out for 2022 models like the **Sony XR65A80K** OLED at very attractive prices.

TCL haven't announced when their 2023 TV range will be hitting the shelves, but the focus seems to be on QLED and Mini LED displays. Look out for some good deals on models that performed reasonably well in our testing but just missed out on a recommendation, such as the **65C835** model.

A growing trend

While some may think that a TV with a 32-inch display is large enough, sales figures indicate that most Australian households consider a 'standard' size for a TV to be significantly larger. The most popular size for TVs by sales volume has quickly jumped from 42-inch several years ago to 65-inch today, and some TV companies have even started removing 32- and 42-inch TVs from their 2023 ranges, reflecting the 'bigger is better' trend.

IMAGES: GETTY

RECENTLY RELEASED LG

$3695

82%

LG OLED65CSPSA

LG released this model very late in 2022 and it was a welcome addition to the market, providing a good-value OLED option for anyone unwilling or unable to pay top dollar for a C2- or G2-series OLED.

Gaming enthusiasts will appreciate support for HDMI 2.1 on all four HDMI ports as well as Dolby Atmos and Vision IQ support.

While our viewing panel found the overall performance for HD and 4K content to be better on the C2- and G2-series OLED models, the image quality was still very good overall. This model may very well be one of the best value options in the EOFY sales.

Warranty

While LG, Samsung and Sony only offer the standard 1-year warranty, Hisense, Metz and TCL offer 3 years. Some promotional offers include additional years' warranty for things like the display panel. But don't be swayed by a long warranty on a component of the TV if the company lacks the confidence to offer the same length of warranty for the whole TV.

SOLID-PERFORMING SONY

$1695

77%

Sony KD65X85K

Sitting in the middle of the Sony LCD range for 2022, this is a solid performer overall, with support for HDMI 2.1 and features such as high refresh rates at 4K. Sony claims that the TV can optimise the sound for your room and we found the audio performance had good separation, but was only OK overall. There is also a sensor that adjusts the screen brightness to suit the ambient light. The TV supports Apple Homekit, Google Chromecast and Alexa, and you don't need to speak into the remote for voice control because the mic is built into the TV.

Expect to see this TV going cheap in the sales, particularly if the cheaper **KD65X80K** (without HDMI 2.1 support) or the more expensive **XR65X90K** run out of stock. ▶

Shop Ethical rating

BRAND	RATING
Bauhn (Aldi)	C
Hisense	F
Kogan	F
LG	C
Samsung	F
Sony	D
TCL	F

NOTES: Other brands in our review not mentioned here don't have a Shop Ethical rating. For more on Shop Ethical ratings and what they mean, see page 73.

					PERFORMANCE											SPECIFICATIONS						
Recommended		Year tested	Type	Price ($)	CHOICE Expert Rating (%)	HD picture quality score (%)	SD picture quality score (%)	4K/UHD score (%)	User interface score (%)	Remote control score (%)	Smart TV score (%)	Energy use score (%)	EPG score (%)	Sound quality score (%)	Voice assistant score (%)	Size (cm)	Size (in)	HDMI inputs	HDMI 2.1 support	USB inputs	Headphone output	Weight with stand (kg)
✓	**LG** OLED42C2PSA	2022	O	2295	84	82	90	90	93	71	93	72	70	75	76	106	42	4	✓	3	✓	9.3
✓	**LG** OLED55C2PSC	2022	O	3195	84	87	85	90	93	71	93	74	70	75	76	139	55	4	✓	3		14.6
✓	**LG** OLED65C1PTB	2022	O	3495	84	81	87	95	92	72	93	74	70	85	82	164	65	4	✓	3	✓	32.6
✓	**LG** OLED65G2PSA	2022	O	4995	84	86	84	90	93	71	93	78	70	80	76	164	65	4	✓	3		27.6
✓	**LG** OLED65CSPSA	2023	O	3695	82	78	83	85	93	71	93	75	80	80	76	164	65	4	✓	3		32.6
✓	**Sony** XR48A90K	2022	O	2795	80	77	77	90	95	65	95	71	80	70	76	121	48	4	✓	1	✓	16.5
✓	**LG** 65QNED80SQA	2022	L	2495	79	73	83	85	93	71	93	76	70	55	76	164	65	4	✓	2		24.9
✓	**Samsung** QA55LS01BAW	2022	L	1795	78	83	76	85	88	57	90	70	70	60	64	140	55	4		2		27.6
✓	**Sony** XR65A80K	2022	O	2995	78	73	75	90	93	64	95	75	80	80	76	164	65	4	✓	1	✓	24.6
✓	**Sony** XR65X90K	2022	L	1795	78	75	79	80	93	64	90	70	80	70	76	164	65	4	✓	1	✓	24
	LG 43NA75SQA	2022	L	1126	77	69	77	85	93	71	93	69	70	75	76	108	43	3		2		9.3
	LG 65NA75SQA	2022	L	1976	77	67	78	85	93	71	93	72	70	75	76	164	65	3		2		22.9
✓	**LG** 65UP8000PTB	2022	L	1495	77	71	78	80	92	72	93	72	70	75	82	164	65	3	✓	2	✓	21.8
✓	**Samsung** QA65LS03BAW	2022	L	1599	77	81	76	80	88	57	90	69	70	70	64	163	64	4	✓	2		22.8
✓	**Samsung** UA32T5300AW	2021	L	545	77	76	79	na	87	80	93	78	70	30	na	81	32	2		1		4.1
✓	**Sony** KD65X85K	2023	L	1695	77	76	78	80	87	64	95	66	80	55	76	164	65	4	✓	1	✓	23
	Hisense 43A7HAU	2022	L	899	76	66	80	85	88	74	93	72	70	60	58	108	43	3		1	✓	9.2
	Hisense 65A7HAU	2022	L	1499	76	66	79	80	88	74	93	77	70	65	58	164	65	3		1	✓	19
	LG 55UP8000PTB	2021	L	1099	76	69	76	80	92	72	93	70	70	65	82	139	55	3		2	✓	14.2
✓	**Hisense** 55A7HAU	2022	L	795	75	70	76	65	87	74	93	77	70	65	66	139	55	3		1	✓	13.4
	LG 50UQ9000PSD	2022	L	1076	75	66	74	75	93	71	93	71	70	70	76	126	50	3		2		11.9
	LG 65QNED85SQA	2022	L	3376	75	68	70	85	93	71	93	74	70	70	76	164	65	4	✓	2		30.6
	LG 65QNED91SQA	2022	L	4679	75	65	76	85	93	71	93	76	70	70	76	164	65	4	✓	2		28.6
	Sony KD-65X80K	2022	L	1395	75	68	71	80	95	64	95	71	80	65	60	164	65	4		1	✓	22.7
	LG 50NA75SQA	2022	L	1195	74	66	72	80	93	71	93	71	70	70	76	126	50	3		2		12.4
	LG 65UQ9000PSD	2022	L	1576	74	64	71	80	93	71	93	71	70	70	76	164	65	3		2		21.8
	Samsung UA65BU8000W	2022	L	1295	74	67	77	80	88	57	90	76	70	65	64	163	64	3		2		21.3
	Sony KD50X75K	2022	L	995	74	74	70	80	87	61	95	72	80	45	76	125	49	3		2	✓	10
	Hisense 65U7HAU	2022	L	1999	73	72	63	80	88	68	95	75	70	50	58	164	65	4	✓	1	✓	19
	Metz 55MXD9500A	2022	O	1499	73	70	71	85	73	75	78	70	70	75	50	140	55	3		2		17.4
	Samsung QA43QN90BAW	2022	L	1495	73	76	67	70	88	57	90	62	70	55	66	108	43	4	✓	2		13.8
	Samsung UA50BU8000W	2022	L	995	73	68	78	85	88	57	90	70	70	45	64	125	49	3		2		11.8
	Hisense 65U9G	2022	L	2499	72	71	65	75	93	65	85	67	70	55	64	164	65	4		1	✓	26
	Samsung QA50QN90BAW	2022	L	2499	72	72	67	75	88	57	90	66	70	50	64	125	49	4	✓	2		18.6
	Samsung QA65S95BAW	2022	O	2995	72	72	65	80	88	57	90	70	70	60	64	165	65	4	✓	2		25.5
	TCL 32S615	2021	L	245	72	68	72	na	70	76	88	77	70	60	58	81	32	2		1		3.6
	TCL 43C635	2022	L	595	72	69	72	80	77	55	93	75	80	50	53	109	43	2		0	✓	7.9
	Hisense 75A7G	2021	L	2299	71	60	67	60	93	74	85	78	70	70	61	189	74	3		1	✓	28.5
	Samsung QA65QN90BAW	2022	L	2495	71	63	74	80	88	57	90	63	70	65	64	163	64	4	✓	2		31.4
	TCL 65C835	2022	L	1495	71	73	64	65	82	55	93	64	80	60	53	164	65	4	✓	2	✓	26

TABLE NOTES Recommended We recommend models with a CHOICE Expert Rating of 75% or more and at least 70% for SD and HD resolution. **Type O** OLED. **L** LCD. **Price** RRP as supplied by manufacturers, or indicative price online or instore up to May 2023. **CHOICE Expert Rating** is made up of HD picture quality (30%), SD picture quality (20%), 4K/UHD picture quality (5%), user interface (10%), remote control (10%), smart TV (10%), energy use (5%), EPG (electronic program guide) (5%) and sound quality (5%). **Energy use score** Based on 10 hours in use and 14 hours in standby mode for 365 days at 30c per KWh. **Voice assistant score** is not included in the CHOICE Expert Rating. **na** Not applicable. All Sony TVs are made in Malaysia except the Sony KD50X75K, which is made in Vietnam. Hisense, TCL and Metz TVs are made in China. All Samsung TVs are made in Vietnam except the Samsung QA65S95BAW, which is made in Mexico. All LG TVs are made in Indonesia. ■.

JUNE
30
THE EOFY ISSUE

Smart mobile purchases

With new releases expected from Google and Apple later this year, the EOFY sales could offer some appealing discounts, says **Denis Gallagher**

With the end of the financial year approaching, it could be a good time to upgrade your smartphone, especially if you use it for work and can claim at least a portion of it as a tax deduction (see page 26 for more details on claiming tech at tax time).

And if you're replacing an older model smartphone, you may be happy with a recent release rather than the very latest. Here are the models from the big brands that you're likely to find discounted in the EOFY sales.

Bagging an EOFY bargain

Samsung is by far the biggest seller of Android mobiles, with models available from around $150, up to more than $2000 for its premium Galaxy range. The company usually announces its Galaxy range in February, with the new models reaching the shelves soon after. This means that by the time the EOFY sales roll around, this year's Galaxy S23 smartphones will have been out for long enough to be eligible for discounts from online retailers or physical stores, as well as through appealing mobile plans with one of the three major telcos (Telstra, Optus or Vodafone). Samsung generally takes a few years to officially discontinue a Galaxy model so you'll not only be likely to find a bargain for the current Galaxy S23, but also the S22 and even S21 Galaxy range.

Google's release history points to a new Pixel premium mobile (Pixel 8) being released in October, following the inevitable Apple iPhone release in September. However, Google has also just announced an update to the current model, with the Pixel 7a now available for $749. This means big discounts on the Google Pixel 6a and 7 in the EOFY sales.

Oppo offers a range of Android models, with models priced from around $200 to $1500, and like Samsung, many of the premium Oppo smartphones will remain available long after new models are announced.

Apple is rumoured to be releasing a raft of iPhone 15 models with various displays, storage sizes and prices in September. The iPhone 15 range will likely be the first Apple smartphones to share the same USB connection type as the rest of the industry, finally moving from lightning to USB-C following the European Union mandate that makers of consumer electronics adopt the USB Type-C charging standard by 2024. ▶

Apple's next release is expected to come with a USB-C instead of lightning connection

IMAGE: GETTY

Apple rarely offers a discounted price for their iPhones, even during Boxing Day and Black Friday sales. Instead, the savings normally come in the form of an Apple credit voucher rather than a drop in the price.

What you may see is non-Apple retailers offering good deals on Apple iPhone 12 and 13 models. The biggest savings at the Apple store will likely be in the weeks leading up to the iPhone 15 announcement with the iPhone 12 most likely disappearing from sale altogether and the iPhone 13 range reduced to one model. For example, you may see the iPhone 13 with 128GB storage suddenly drop to $999.

BEST ANDROID SMARTPHONE

86%

Samsung Galaxy S23 Ultra (256GB)

Despite the release of new models from various smartphone makers with displays that flip and fold, the top performing Android mobile continues to be a simple large screen device, with a fast processor and a great camera.

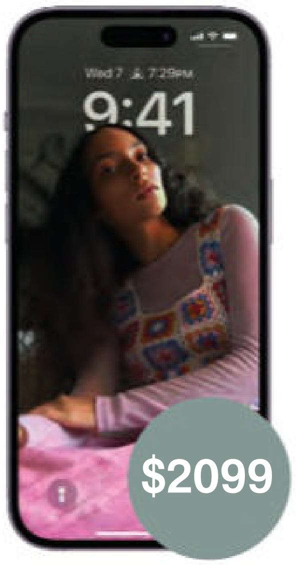
This model with 6.8-inch display delivers what our testers consider to be a very good display and excellent camera for general photo-taking, and an excellent front 'selfie' camera for party and close-up snaps.

Most of the premium smartphone ranges offer several versions of the same model with the only difference being the internal storage size. However, this 256GB model has 8GB RAM, which is lower than the 12GB RAM offered by the 512GB and 1TB versions. The overall performance differences seem minimal though, according to our tests, and a small sacrifice to make for a saving of more than a couple of hundred dollars.

BEST APPLE IPHONE

85%

Apple iPhone 14 Pro Max (256GB)



Despite coming late to the large-screen smartphone market, Apple continues to produce some of the best smartphones in terms of performance, camera quality and overall ease of use. But they also continue to be the most expensive, with only one model priced under $1000 at the Apple Store.

The iPhone 14 Pro Max is without doubt the most powerfully featured Apple smartphone yet, but owners of an iPhone 13 or even iPhone 12 may not feel that the bump in performance and features are worth it. However, owners of Apple iPhone 11 smartphones and older will get 5G and a significant jump in battery life and camera quality.

The smartphone comes in two different configurations and sizes (6.1- or 6.7-inch display). Choosing the one that is right for you depends on your budget and desire for the best possible camera. While the **iPhone 14/14 Plus** and **iPhone 14 Pro/14 Pro Max** are similar in look, features and functionality, the more expensive Pro and Pro Max include faster processors and better cameras as well as better video and GPS performance.

Warranties & support

With mobiles expected to last a few years, some companies are now providing improved OS and security updates for several years and some are not. Samsung and Google have committed to at least four years support, while Apple offers at least five years and Oppo three years.

Warranties are still shorter than the support period though. Apple and Google only offer one year of warranty while Samsung and Oppo offer two years.

Shop Ethical rating

BRAND	RATING
Apple	C
Google	F
Oppo	F
Samsung	F

NOTES: For more on Shop Ethical ratings and what they mean, see p73.

			PERFORMANCE															SPECIFICATIONS					
Recommended		Price ($)	CHOICE Expert Rating (%)	Performance score (%)	Display score (%)	Battery score (%)	Main camera score (%)	Video quality score (%)	Sound quality score (%)	Touchscreen score (%)	Selfie camera score (%)	Calling sound quality score (%)	GPS score (%)	Ease of use score (%)	Durability score (%)	Privacy score (%)	Time in use (hrs) from 15 min charge	Battery capacity (mAh)	Display size (inches)	Available internal memory (GB)	Maximum main camera resolution (MP)*	Front camera selfie resolution (MP)	Weight (g)
✓	**Samsung** Galaxy S23 Ultra (256GB)	1749	86	90	86	71	99	77	80	90	99	78	88	86	82	85	2	5000	6.8	212	200, 12, 10, 10	12	238
✓	**Apple** iPhone 14 Pro Max (256GB)	2099	85	88	83	71	95	81	81	80	100	68	99	81	88	91	2	4323	6.7	248	48, 12, 12	12	242
✓	**Apple** iPhone 14 Pro (256GB)	1899	84	88	83	61	95	81	80	80	100	67	99	81	88	91	3	3200	6.1	248	48, 12, 12	12	207
✓	**Samsung** Galaxy S23 Plus (256GB)	1449	84	90	83	67	92	75	79	90	99	78	88	87	82	85	3	4700	6.6	213	50, 12, 10	12	200
✓	**Samsung** Galaxy S22 Ultra (256GB)	1299	83	92	85	53	96	73	80	90	100	81	88	83	81	84	2	5000	6.8	217	108, 12, 10, 10	40	228
✓	**Samsung** Galaxy S23 (256GB)	1249	83	90	83	60	91	75	79	90	99	79	88	87	82	85	3	3900	6.1	214	50, 12, 10	12	170
✓	**Apple** iPhone 13 (256GB)	1399	82	96	89	69	84	80	85	80	83	63	66	87	76	87	2	3227	6.1	245	12, 12	12	175
✓	**Samsung** Galaxy S21 5G (256GB)	1349	82	100	89	43	85	72	84	90	93	77	88	85	78	71	2	4000	6.2	218	12, 12, 64	10	171
✓	**Samsung** Galaxy S22 Plus (256GB)	1649	82	89	81	54	88	74	80	90	100	87	88	85	82	85	2	4500	6.6	246	50, 12, 10	10	194
✓	**Apple** iPhone 14 Plus (256GB)	1749	81	88	80	70	91	78	81	80	100	63	66	68	81	91	2	4323	6.7	248	12, 12	12	203
✓	**Oppo** Find X5 Pro 5G (256GB)	1399	81	91	83	68	86	69	81	80	71	85	99	84	61	86	14	5000	6.7	229	50, 50, 13	32	217
✓	**Samsung** Galaxy S21 Plus 5G (128GB)	1549	81	96	89	50	82	72	86	90	93	76	88	85	78	64	2	4800	6.7	101	12, 12, 64	10	201
✓	**Samsung** Galaxy S22 (256GB)	1249	81	90	82	46	89	74	80	90	100	84	88	84	82	85	2	3700	6.1	246	50, 12, 10	10	169
✓	**Apple** iPhone 12 (256GB)	1299	80	96	89	59	84	83	80	80	83	60	66	89	43	87	3	2815	6.1	242	12, 12	12	162
✓	**Apple** iPhone 13 mini (256GB)	1219	80	96	85	56	84	80	84	80	83	59	66	86	76	87	3	2406	5.4	240	12, 12	12	141
✓	**Apple** iPhone 14 (256GB)	1579	80	88	81	61	92	78	82	80	100	63	66	69	81	91	3	3279	6.1	248	12, 12	12	171
✓	**Google** Pixel 7 Pro (256GB)	1199	80	92	82	52	94	72	73	90	84	69	66	82	80	91	2	5000	6.7	246	50, 12, 48	11	212
✓	**Samsung** Galaxy Z Fold4 (256GB)	2499	80	92	77	56	86	74	80	90	80	77	88	87	76	84	3	4400	7.6	213	50, 12, 10	10	269
✓	**Apple** iPhone 12 (128GB)	1129	79	92	89	59	84	83	80	80	83	60	66	89	43	87	3	2815	6.1	118	12, 12	12	162
✓	**Oppo** Find X5 5G (256GB)	999	79	88	78	63	88	68	80	80	71	76	99	81	79	85	15	4800	6.6	229	50, 50, 13	32	197
✓	**Samsung** Galaxy Z Flip4 (256GB)	1649	79	90	77	45	86	72	76	90	80	75	99	86	75	84	2	3700	6.7	246	12, 12	10	190
✓	**Samsung** Galaxy Z Fold3 (256GB)	2499	79	100	82	45	84	68	88	90	75	75	99	87	63	70	2	4400	7.6	215	12, 12, 12	10	277
✓	**Google** Pixel 7 (256GB)	929	77	89	76	51	89	70	71	90	76	70	66	81	80	91	3	4355	6.3	246	50, 12	11	196
	Apple iPhone SE 2022 (128GB)	799	71	80	64	51	82	73	76	80	72	61	55	62	80	89	3	2018	4.7	120	12	7	145
	Oppo Find X5 Lite 5G (256GB)	699	71	69	70	68	78	64	49	80	64	81	88	79	58	84	20	4500	6.4	230	64, 8, 2	32	175

TABLE NOTES Recommended We recommend phones that score at least 75% overall. **Price** Recommended retail as of April 2023. **CHOICE Expert Rating** is made up of display (15%), performance (15%), battery life (10%), main camera (10%), video quality (10%), sound quality (5%), touchscreen (5%), selfie camera (5%), calling sound quality (5%), GPS (5%), ease of use (5%), durability (5%) and privacy and security (5%). * First figure shows main lens resolution, additional figures show resolution of additional lenses. All smartphones in this test have 5G network support, use a Nano SIM and capture 4K video. They all have Bluetooth (5 or greater) and NFC for tap and pay, a gyroscope and compass. None have a user-removable battery. All but the Oppo Find X5 and Find X5 Lite claim a waterproof rating of at least IP67. All Apple iPhones use the Lightning USB connection while the rest use USB-C. All support the Wi-Fi connection of 802.11 ax (Wi-Fi 6). All support face detection except the Apple iPhone SE 2022 to unlock the mobile and all support the use of an eSIM (electronic SIM, or embedded SIM) and wireless charging except the Oppo Find X5 Lite. The Oppo Find X5 Lite is the only model with a memory card slot and a headphone jack. The table includes the results for the 256GB model where available, otherwise a model with less storage. The iPhone SE 2022 is the only Apple model with a fingerprint scanner; all the other smartphone brands in the table have the feature on all models. Most Samsung smartphones as well as the Google 7 and 7 Pro are manufactured in Vietnam and Apple iPhones and Oppo smartphones are made in China. ■

IMAGE: GETTY

Wax over wireless

Bluetooth turntables bring convenience, but how do they compare for sound with the traditional speaker set-up? **Peter Zaluzny** finds out

For the first time in decades, the core design of turntables and record players has undergone a relatively significant change. Many of the units for regular listeners and serious enthusiasts alike now come with Bluetooth connectivity for external speakers or headphones.

Though this feature has been around for some time, it's only been available in a handful of models. Now, all but one of the turntables in our latest test include this feature, which is why you may notice we've added a wireless listening assessment to our test.

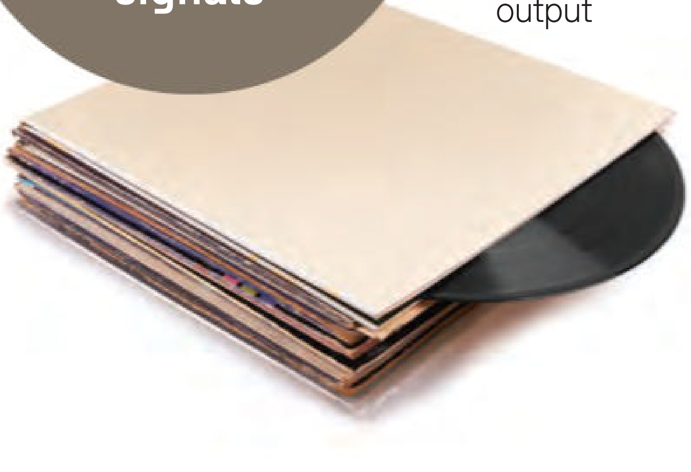
So, before you spend your scratch on a new turntable, it's worth understanding how Bluetooth transmits audio, to see if it suits your needs and sound quality preferences. To help you decide, we also ran wired and wireless comparison tests.

Bluetooth goes in, Bluetooth goes out

Bluetooth can send and receive data including digital audio signals. If a turntable has Bluetooth out, it means audio can be sent to supported speakers, headphones or a Bluetooth receiver.

Meanwhile, Bluetooth input lets you send an audio signal to the turntable from a device like a phone, laptop or tablet. In this case, the turntable can then play your audio through connected speakers, which can be useful if your speakers aren't Bluetooth-enabled. Though there are plenty of Bluetooth-enabled turntables, very few support both input and output

Few Bluetooth-enabled turntables support both input and output signals



signals (most only support output). If you want one that can connect directly to Bluetooth speakers, make sure the model you choose supports Bluetooth out. This information will be in the product specifications and is also in our test results.

Wired vs wireless audio

Broadly speaking, wired audio sounds better, while wireless is more convenient. But a proper explanation requires a basic understanding of how analogue and digital audio works.

SOUND KNOWLEDGE

Before digital formats and devices came along, audio used analogue technology, which is essentially electrical signals sent over cables. Speakers still use analogue tech, as does vinyl, which means the audio isn't converted to a digital signal at any point from the moment the needle hits the wax.

Most other audio formats, such as streaming and CDs, are digital. When the files reach your smartphone, hi-fi or Bluetooth speakers, for example, they're converted into an analogue signal via a magical device called a digital-to-analogue converter (DAC for short).

Because Bluetooth is a digital format, the turntable needs to convert its analogue signal before it can be wirelessly transmitted. Then, another DAC turns it back into an analogue signal in the speakers.

BETTER BLUETOOTH

So what's the catch? Bluetooth's convenience has always come with a caveat – compression. There's only so much bandwidth in a wireless signal, so Bluetooth compromises the quality to transmit audio data in a manageable package. It's not unlike streaming services using compressed audio to reduce data consumption.

However, Bluetooth has gone through various iterations over the years that have brought increased bandwidth and better compression algorithms. The versions we use today have far less audible compression and sound much better than earlier releases.

But even then, the purely analogue signal is still being converted to a digital format which, according to audio enthusiasts, misses the all-analogue point of vinyl. The music you're hearing at the other end isn't truly representative of what the record sounds like.

Why go wireless?

Mainly for convenience. Bluetooth turntables have a built-in amplifier, so you connect them directly to a Bluetooth speaker without the use of any cords or cables. The wired option is still available, mind you, as most of these turntables still include cable ports, so you can switch between wired and wireless.

For example, you could have a nice hi-fi set-up in your lounge room all hooked up via physical points, and a pair of Bluetooth speakers or headphones in your bedroom. Instead of moving the turntable, all you need to do is connect to speakers that are easy to move, or a Bluetooth receiver, and you're good to go.

> **Most consumer-grade turntables deliver better quality over a wired connection**

Which should you choose?

Our test found that most consumer-grade turntables deliver better audio quality over a wired connection than via Bluetooth, though not by much. Honestly, this surprised our listening panel. While there were a couple of exceptions, this shows that the average set of ears may be perfectly happy with wireless. ▶

IMAGES: GETTY

Nevertheless, it's worth asking yourself why you want to buy a turntable before committing to a specific set-up. If you're just after something simple to play your old records and you're not chasing optimum sound quality, connect to a Bluetooth speaker and go nuts. If you're after something more, then there are a few more things to consider.

Vinyl is expensive these days; a new album can cost as much as $100. If you want to get the most out of your outlay, you're going to need a good pair of speakers or Bluetooth headphones. But there aren't many top-notch Bluetooth options that can match a nice pair of hi-fi-grade bookshelf speakers.

Also, most Bluetooth speakers are self-contained, single units, so if you prefer listening to your audio on a stereo set-up with dedicated left and right speakers, you'll need to pair two speakers (if your app allows that), or you'll need to buy a Bluetooth audio receiver, which is what we used in our test. But cables are far more convenient in a set-up like this, unless they can't quite reach, or your record player is in another room. Plus, cables are much more affordable than a good quality Bluetooth receiver.

Of course, there's so much more that goes into finding the right gear, calibrating a turntable and so on. But overall, you can't beat classic cable connectivity if you want the best sound quality.

How we test Bluetooth listening quality

Bluetooth turntables are connected to the same hi-fi system and speakers that we use for the wired listening panel, via a high-end Bluetooth receiver. Then our panellists listen to one of the tracks used in the wired assessment to directly compare the wireless audio quality.

CHART TOPPERS

$699

80%

Pro-Ject E1 BT

This manual turntable is the only model in our test to earn a very good CHOICE Expert Rating, and it's among the top performers in our wired listening assessment. Though it also supports Bluetooth out, performance takes a substantial hit with audio quality that's only OK. If you're thinking about buying this model, you'd be better off using cables and only switching to Bluetooth as a back-up. While the cartridge can be replaced, the E1 BT doesn't include tracking force and anti-skate adjustment. This means it won't be correctly calibrated for anything but the included Ortofon OM 5e cartridge. The belt drive, which can reduce vibration, will wear down over time and eventually need to be replaced.

$779

79%

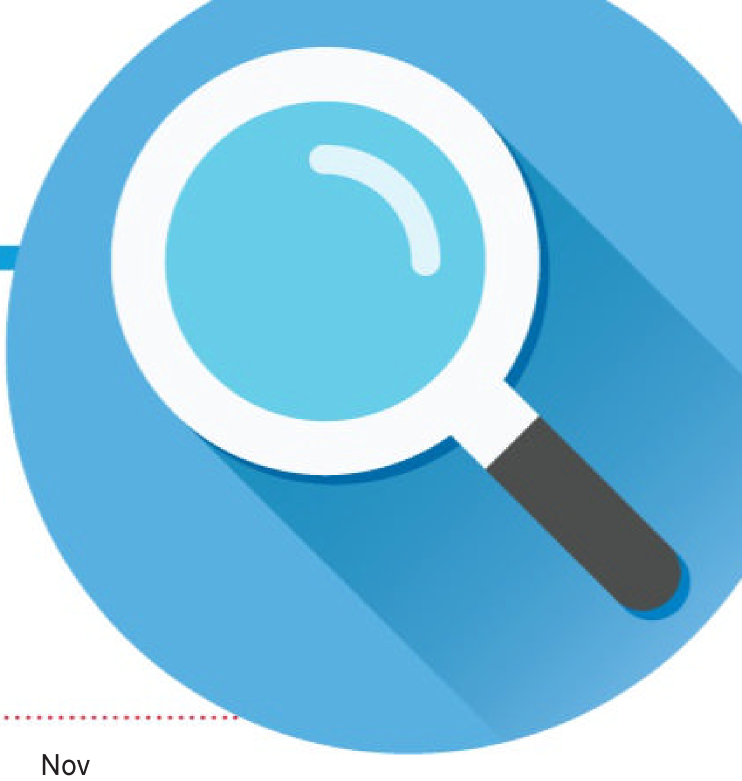
Audio-Technica AT-LP120XBT-USB

This popular "homage" to the iconic Technics SL-1200MK2 turntable has been around for some time, and it now comes with bonus Bluetooth. The wireless results are similar to the wired test, making Bluetooth a viable option for this model if you're looking for convenience over top-notch quality. It uses a direct drive motor, which has greater accuracy than a belt option but can increase vibration, and it has all the controls required to calibrate tracking force and anti-skate adjustment. This gives you the freedom to swap the cartridge for just about any alternative that you prefer.

			PERFORMANCE					SPECIFICATIONS											
Recommended		Price ($)	CHOICE Expert Rating (%)	Listening score – wired (%)	Listening score – Bluetooth (%)*	Ease of use score (%)	Technical assessment score (%)	Phono pre-amp built-in	Bluetooth input	AUX input	Stop/start**	Tracking force adjustment	Anti-skate adjustment	Drive type	Operation***	Dimensions (mm, H x W x D)	Weight (kg)	Warranty (years)	Country of origin
✓	**Pro-Ject** E1 BT	699	80	77	63	75	90	✓						B	Manual	110 x 421 x 334	4	2	Czech Republic
✓	**Audio-Technica** AT-LP120XBT-USB	779	79	77	73	75	88	✓			✓	✓	✓	DD	Manual	143 x 451 x 365	8	1	China
✓	**Pioneer** DJ PLX-500	719	78	78	na	72	83	✓			✓	✓	✓	DD	Manual	160 x 451 x 368	11	1	China
✓	**Pro-Ject** Primary E	439	78	76	na	68	89					✓		B	Manual	112 x 420 x 330	4	2	EU
✓	**Audio-Technica** AT-LP3XBT	699	75	76	70	73	75	✓			✓	✓	✓	B	Full auto	125 x 435 x 370	5	1	China
✓	**Monster** MT-TT03	699	75	73	na	81	75	✓	✓			✓	✓	B	Auto stop	154 x 425 x 351	5	2	China
✓	**Pro-Ject** Essential III	659	75	71	na	67	90					✓	✓	B	Manual	110 x 420 x 333	4	2	EU
✓	**Pro-Ject** Jukebox E	999	75	71	nt	68	90	✓	✓	✓		✓		B	Manual	118 x 415 x 334	5	2	EU
	Rega RP1	649	74	69	na	60	93					✓	✓	B	Manual	112 x 442 x 362	4	(A)	England
	Marley Stir It Up Wireless	449	73	72	70	54	88	✓				✓	✓	B	Manual	125 x 420 x 357	4	2	China
	Denon DP-300F	699	72	65	na	81	83	✓			✓	✓	✓	B	Full auto	122 x 434 x 381	6	3	China
	Pro-Ject Debut RecordMaster	769	72	64	na	69	90	✓				✓	✓	B	Manual	118 x 415 x 320	6	2	EU
	Rega RP3 plus Elys 2 cartridge	1799	72	73	na	51	84					✓	✓	B	Manual	114 x 443 x 364	6	(A)	England
	Sony PS-LX310BT	399	69	69	63	66	73	✓			✓			B	Full auto	110 x 431 x 360	3	1	China
	Rega Planar 2	999	68	65	na	58	83					✓		B	Manual	113 x 448 x 366	5	(A)	England
	Audio-Technica AT-LP60XBT	389	67	67	67	79	60	✓			✓			B	Full auto	98 x 359 x 372	3	1	China
	Denon DP-400	1099	65	57	na	62	88	✓				✓	✓	B	Manual	132 x 414 x 347	6	3	China
	Flea Market FMTTBTWAL1	239	52	34	27	78	78	✓	✓	✓				B	Auto stop	145 x 414 x 330	4	1	China
	Jam Spun Out	150	51	44	63	53	65	✓		✓				B	Manual	120 x 388 x 325	3	1	China

TABLE NOTES Recommended We recommend turntables with a CHOICE Expert Rating of 75% or more. **Price** Recommended price as of April 2023. **CHOICE Expert Rating** is made up of wired listening (60%), technical assessment (25%) and ease of use (15%). The Bluetooth listening score doesn't contribute to the CHOICE Expert Rating. **Technical assessment score** Our testers assess the difference between the claimed and measured figures for tracking force, rotational speed and frequency response using calibrated reference LPs. **Drive type B** Belt, **DD** Direct drive. * All models with a Bluetooth listening score support Bluetooth output. Models from previous tests were not retested. ** Fully automatic models will lift the tone arm when the user selects the on/off switch, while models that are not fully automatic will simply stop the platter. *** Full auto models move the tone arm to the start of the record and return it to the holder when each side finishes. Auto stop models stop the record spinning when a side finishes but don't move the tone arm for you. Manual models require you to place and return the arm yourself and don't automatically stop at the end of each side. **(A)** Lifetime. **na** Not applicable. **nt** Not tested. ■

IMAGES: GETTY



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* Indicates a correction or clarification (see Checkout).

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  - your behaviour Jun

BABIES & KIDS

- Button batteries Mar
- Thermometers Jul

TRAVEL

- Car rental Feb
- Flight cancellation rights Feb
- Lost or damaged passport Apr
- Luggage Feb
- Travel insurance Feb
  - pre-existing medical conditions Jun
- Travel money cards Feb

OUTDOOR

- Lawnmowers Feb
- Outdoor kitchens Dec/Jan
- Pet scams Aug
- Pressure cleaners May

HOME IMPROVEMENT

- Reducing energy use Aug
- Smart doorbells Apr
- Smart locks Apr
- Smart meters Mar
- Solar battery trial Nov
- Solar panels & installation Mar
- Tap timers Aug

FOOD & DRINK

- Butter Feb
- Coffee pods Nov
- Cooking on a budget Oct
- Meal delivery kits Nov
- Nootropic drinks Oct
- Oats and porridge May
- Peanut butter Oct
- Supermarket house brand
  - taste test round-up Oct
- Using your leftovers May

HEALTH & BODY

- First-aid kits Sep
- Sleep tips Jul

SHOPPING

- Carbon neutral businesses Aug
- Electronics stores,
  - best and worst Sep
- Ethical shopping on a budget Aug
- Extended warranties Dec/Jan
- Grocery delivery services Dec/Jan
- Packaging recyclability Apr
- Plastic packaging recycling Aug
- Product reliability survey Sep
- Retail technology Jun
- Shonky Awards 2022 Nov
- Shop Ethical ratings Feb
- Shopping sustainably, sales Jun
- Shrinking pack sizes Jul
- Supermarket tricks Feb
- Utilities
  - paying bills Mar
  - switching providers Mar

TRANSPORT

- Dashboard cameras Mar
- Electric cars Mar
- Fuel apps Aug
- Lemon car sales
  - in remote communities Nov

ISSUES BY THEME

July 22	The sleep issue
August 22	The conscious consumer issue
September 22	The product reliability issue
October 22	The food issue
November 22	The Shonkys issue
December 22/January 23	The summer issue
February 23	The travel issue
March 23	The energy issue
April 23	The privacy issue
May 23	The repair and reuse issue
June 23	The EOFY issue

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RATING	KEY
A	Praises, no criticism
B	Some praise, no criticism
C	Praises, some criticism
D	Criticism, some praise
F	Criticisms

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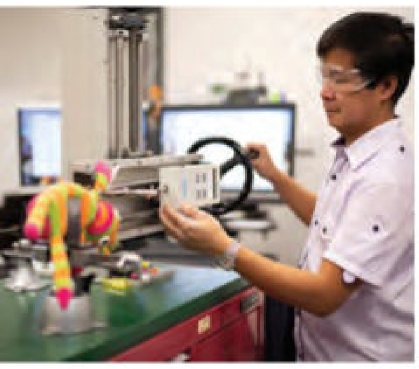

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Corrections: If we've made an error in *CHOICE* magazine, we include the correction in the next available issue (usually in the Checkout section of the magazine). If you think we've got something wrong, please visit **choice.com.au/contactus**.

Reviews and testing: Our testers put products through their paces in our own NATA-accredited laboratories. We use test methods based on Australian standards and develop our own to match the way consumers use a product in their homes. We buy most products we test, maintaining our independence from manufacturers and so we know what you're faced with in the shops. We've checked the models are available at the time we publish. Our recommendations are based on a product's quality and performance, with no hidden bias. See **choice.com.au/editorialguidelines**.

NEXT MONTH CONSUMER TRAPS

Proceed with caution

Greenwashing in super

Are super funds being upfront about their investments?

Contents insurance

Loyalty to your insurer could be costing you hundreds

Down the drain

Are you wasting money on these laundry products?

Plus **Charity marketing, washing machines, electric vehicles & more**

HARD WORD

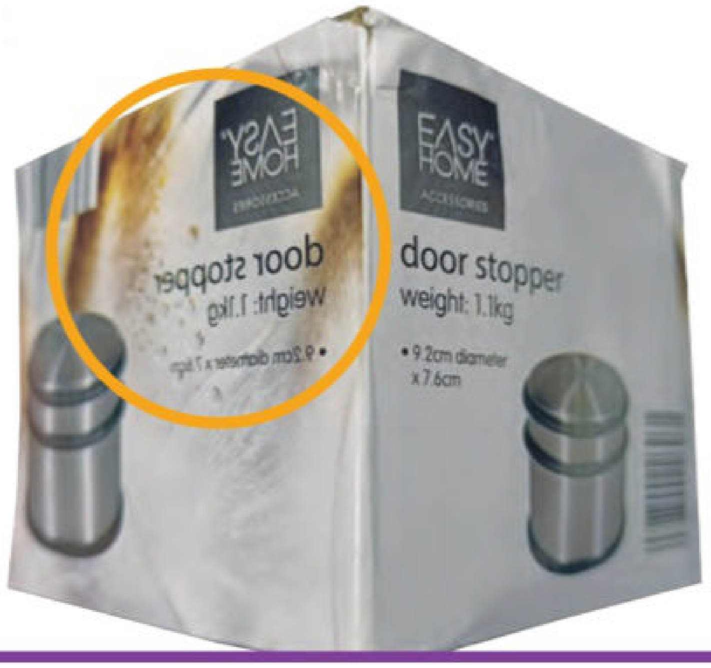
Our long-serving rogues' gallery of dodgy ads, toe-curling typos and misadventures in marketing, as sent in by you – our tickled, angered and bewildered readers. And thanks to the timeless shonkiness of so much advertising, you're always spoilt for choice – so keep 'em coming. Email high-quality unedited photos to **hardword@choice.com.au**.

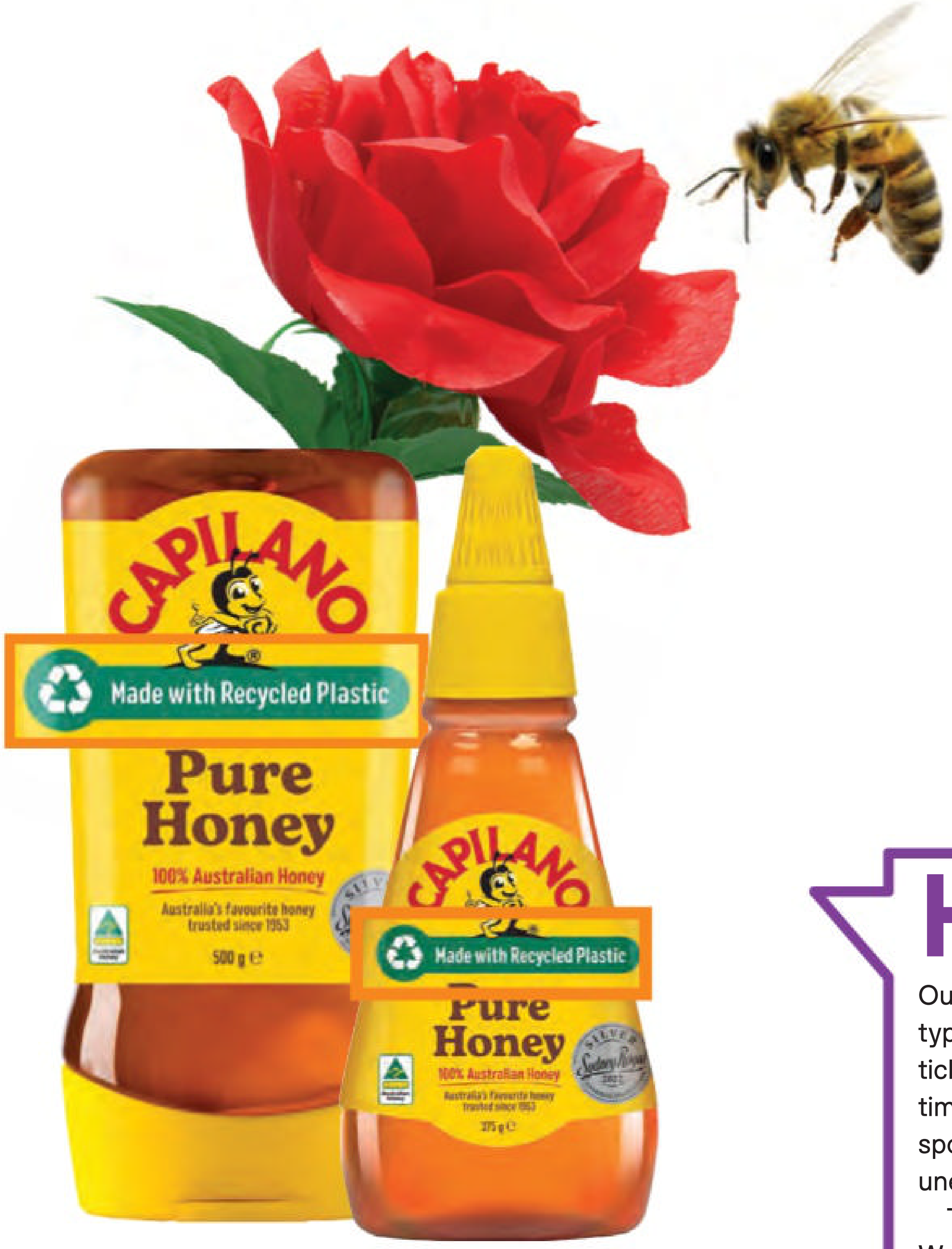
This month, thanks go to Michael Beurlen (Back door), Wendy De Audney (Heart stopper), R Hill and Tony Rhead (Bee-wildered) and James Thomson (Use your head).

Compiled by Daniel Wynne

BACK DOOR

A stopper for mirrored doors, perhaps?


EASY HOME
ACCESSORIES
door stopper
weight: 1.1kg
• 9.2cm diameter x 7.6cm


CAPILANO
Made with Recycled Plastic
Pure Honey
100% Australian Honey
Australia's favourite honey trusted since 1953
500 g ℮
375 g ℮

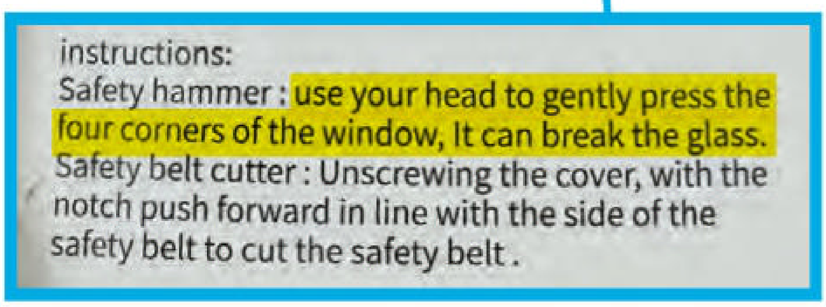
BEE-WILDERED

It seems bees can source pollen from artificial flowers now.

USE YOUR HEAD

Please don't take these safety instructions literally.

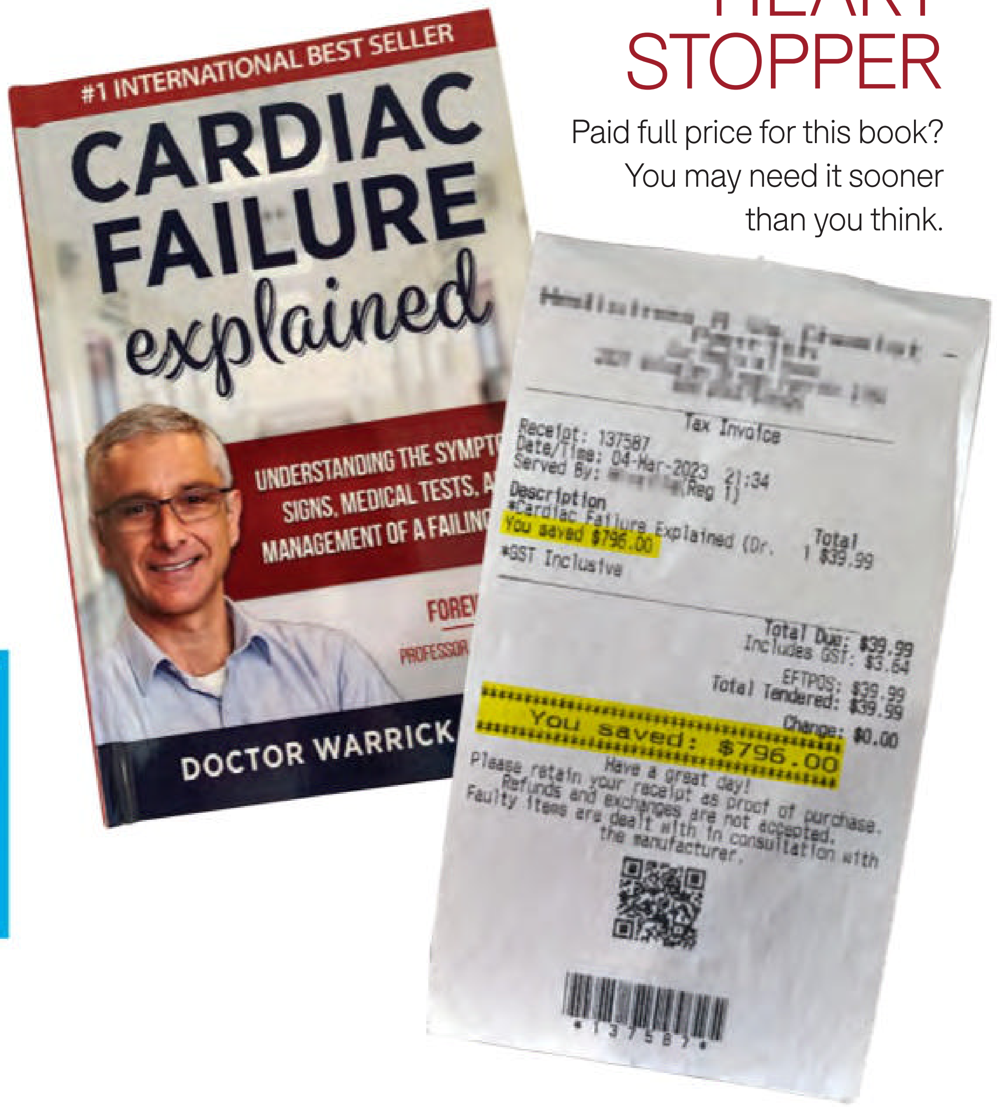
安全锤
Vehicle mounted safety hammer
Instant breakout
Sharp blade



instructions:
Safety hammer : use your head to gently press the four corners of the window, It can break the glass.
Safety belt cutter : Unscrewing the cover, with the notch push forward in line with the side of the safety belt to cut the safety belt .

HEART STOPPER

Paid full price for this book? You may need it sooner than you think.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